



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

EXHIBIT 4
DATE 2/3/09
HB 2

Montana Comprehensive Assessment System (MontCAS)

Presentation to Appropriations
Subcommittee on Education
February 2009



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

1

MontCAS Background

- 2001 - 2007
 - Iowa Tests (ITBS and ITED)
 - Norm Referenced Test (NRT)
 - Grades 4, 8, and 11
 - Language Arts, Reading, Math, Social Studies, Science
 - Summative
 - Required by the Board of Public Education
- 2004 - present +
 - Criterion-Referenced Test (CRT)
 - Grades 3-8 and 10
 - Reading, Math, Science
 - Summative
 - Required by No Child Left Behind



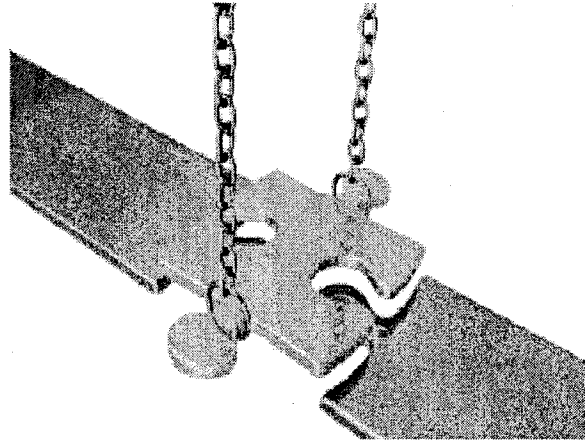
Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

2



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

A Balanced Assessment System for Closing the Achievement Gap



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

3

Summative Assessment

After Instruction

- Examples: unit, semester, statewide tests
- High stakes
 - Grades
 - Program placement
 - Reporting
 - AYP (Adequate Yearly Progress)



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

4



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

Formative Assessment

Classroom based

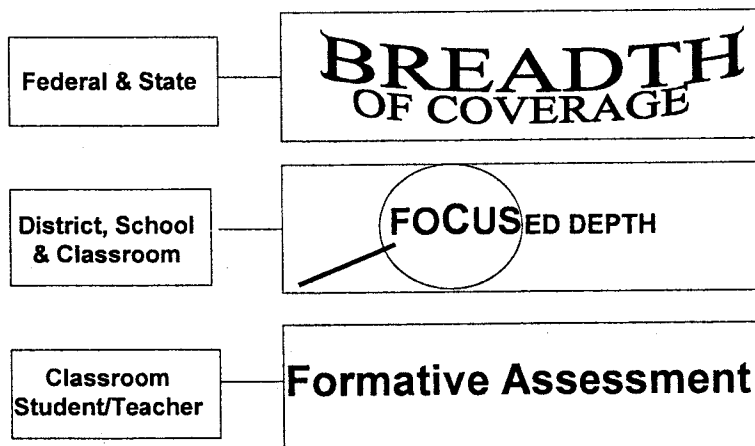
- Used by teachers and students
- Takes place during instruction
- Formal and informal
- Not high stakes
 - Not for program evaluation
 - Not for grading or evaluation of students



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

5

Balanced State Assessment System

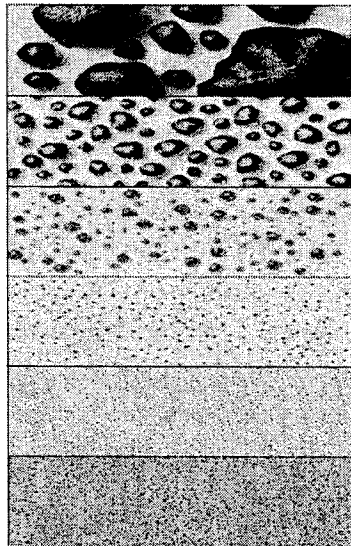


Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

6

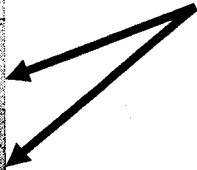


Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov



Different levels of
granularity for
different purposes

**Formative
Assessment**



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

7

Research finds formative assessment “does improve learning.”

Based on 250 empirical studies of classroom assessment drawn from more than 680 published investigations, Paul Black and Dylan Wiliam concluded:

- “The research reported here shows conclusively that formative assessment does improve learning.” (*Assessment in Education*, 1998)
- The student gains in learning triggered by formative assessment were “amongst the largest ever reported for educational interventions.”



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

8



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

Focus of State Assessment Conferences

2007

- Balanced Assessment System

2008 and 2009

- Formative Assessment



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

9

Montana educators say formative assessment is the next step.

- Focus groups in spring and summer 2008
 - Determined themes for statewide assessment survey
 - Approximately 300 educators participated
- Statewide survey in fall 2008
 - 1,575 respondents
 - Representing 52 counties across the state



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

10



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

Focus Group and Survey Results

- Practices and knowledge vary across the state.
- Educators want and need support of formative assessment activities especially:
 - Professional development
 - Learning communities
 - Resources



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

11

Formative Assessment

Takes place continuously during the course of instruction to shape and refine ongoing teaching and learning.

(Assessment Reform Group, 2002; Bell & Cowie, 2001; Black et al., 2003; Black & William, 1998; OECD, 2005; Sadler, 1989; Shepard, 2000)



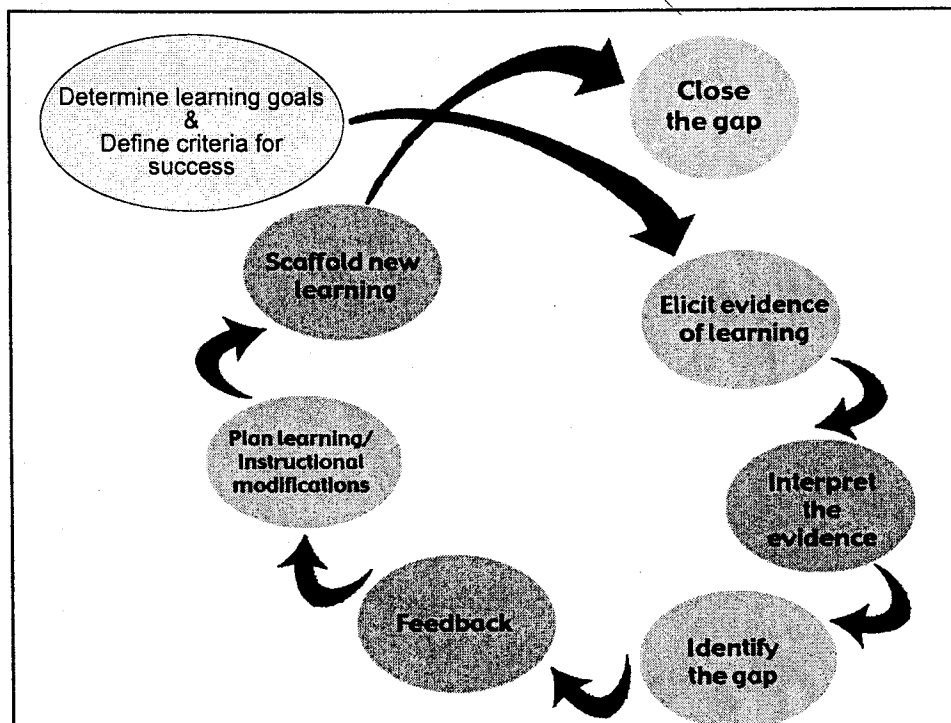
Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

12



It's not about giving tests; it's about evidence-based instruction.

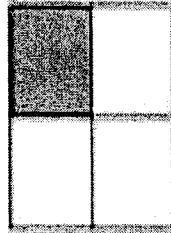
- Establishing clear learning goal(s) and criteria for success
- Eliciting evidence about student learning
- Providing feedback to teachers and students about learning
- Using feedback to adjust instruction and learning tactics in real time
- Involving students actively in their learning



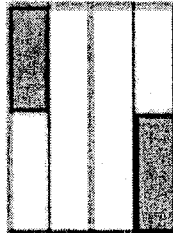


Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

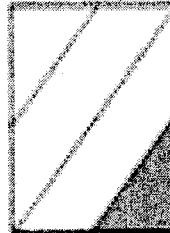
In which of the following diagrams is one quarter of the area shaded?



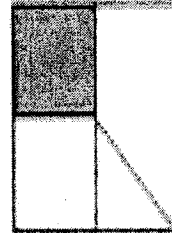
A



B



C



D

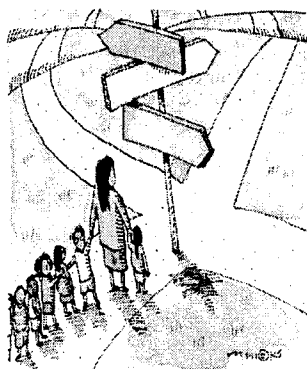
(William, 2006)



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

15

Adjusting Teaching and Learning



- What does my evidence tell me about my students' current learning status?
- Is there a gap between my students' current learning status and the desired goal? What is it? Do I need more evidence?
- Are my students on track to meeting the success criteria/have they met the success criteria?
- Are my students using feedback to adjust their learning?



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

16



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

How does formative assessment help students learn?

- Gives students needed information
 - On the precise points they need to improve
- Keeps students on task
- Involves students in their own learning
- Yields significant learning gains when done well



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

17

How does formative assessment motivate students?

- Can foster
 - student self-regulation
 - student self-efficacy
 - student feelings of control over their own learning
- Can help struggling or reluctant students



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

18



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

How can we support Montana teachers to move learning forward?

- Ongoing professional development accessible to every teacher
- Ongoing learning communities available to every teacher even those in the most remote regions of the state
- Ongoing expert support and consultation when needed
- Resources



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

19

"I believe it can transform classroom culture and make a good teacher even better."

Superintendent Denise Juneau, *Great Falls Tribune*, January 31, 2009.



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

20



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

EXHIBIT 4
DATE 2/3/09
HB 2

Montana Comprehensive Assessment System (MontCAS)

Presentation to Appropriations
Subcommittee on Education
February 2009



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

1

MontCAS Background

- 2001 - 2007
 - Iowa Tests (ITBS and ITED)
 - Norm Referenced Test (NRT)
 - Grades 4, 8, and 11
 - Language Arts, Reading, Math, Social Studies, Science
 - Summative
 - Required by the Board of Public Education
- 2004 - present +
 - Criterion-Referenced Test (CRT)
 - Grades 3-8 and 10
 - Reading, Math, Science
 - Summative
 - Required by No Child Left Behind



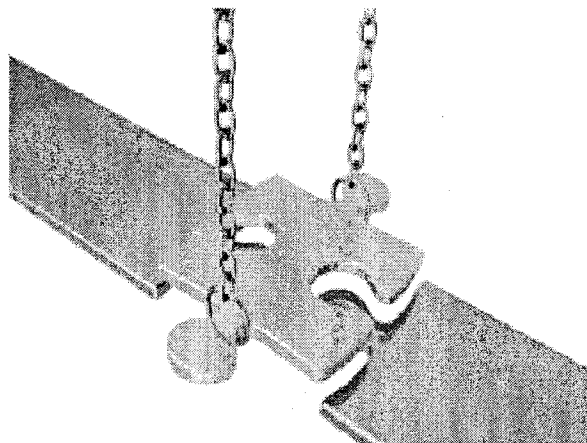
Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

2



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

A Balanced Assessment System for Closing the Achievement Gap



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

3

Summative Assessment

After Instruction

- Examples: unit, semester, statewide tests
- High stakes
 - Grades
 - Program placement
 - Reporting
 - AYP (Adequate Yearly Progress)



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

4



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

Formative Assessment

Classroom based

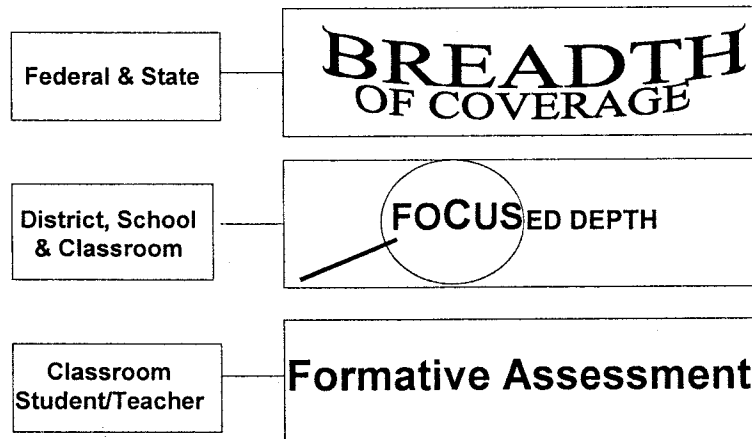
- Used by teachers and students
- Takes place during instruction
- Formal and informal
- Not high stakes
 - Not for program evaluation
 - Not for grading or evaluation of students



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

5

Balanced State Assessment System

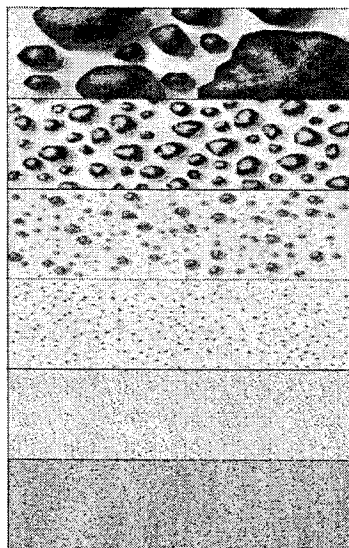


Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

6

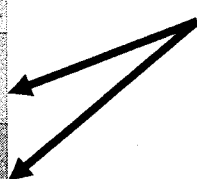


Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov



Different levels of
granularity for
different purposes

**Formative
Assessment**



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

7

Research finds formative assessment “does improve learning.”

Based on 250 empirical studies of classroom assessment drawn from more than 680 published investigations, Paul Black and Dylan Wiliam concluded:

- “The research reported here shows conclusively that formative assessment does improve learning.” (*Assessment in Education*, 1998)
- The student gains in learning triggered by formative assessment were “amongst the largest ever reported for educational interventions.”



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

8



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

Focus of State Assessment Conferences

2007

- Balanced Assessment System

2008 and 2009

- Formative Assessment



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

9

Montana educators say formative assessment is the next step.

- Focus groups in spring and summer 2008
 - Determined themes for statewide assessment survey
 - Approximately 300 educators participated
- Statewide survey in fall 2008
 - 1,575 respondents
 - Representing 52 counties across the state



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

10



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

Focus Group and Survey Results

- Practices and knowledge vary across the state.
- Educators want and need support of formative assessment activities especially:
 - Professional development
 - Learning communities
 - Resources



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

11

Formative Assessment

Takes place continuously during the course of instruction to shape and refine ongoing teaching and learning.

(Assessment Reform Group, 2002; Bell & Cowie, 2001; Black et al., 2003; Black & Wiliam, 1998; OECD, 2005; Sadler, 1989; Shepard, 2000)



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

12



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

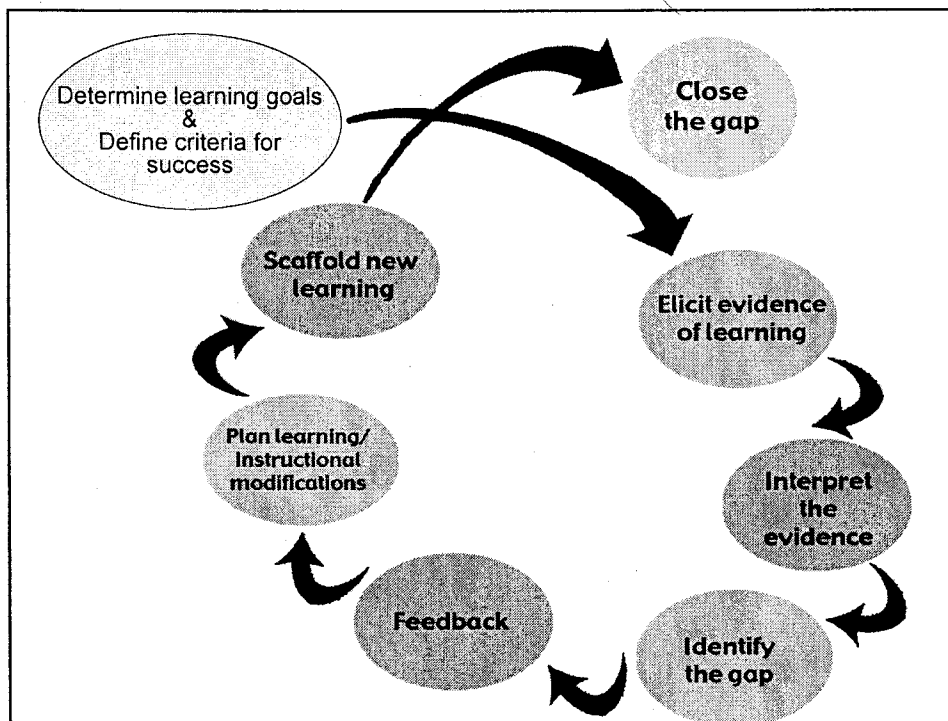
It's not about giving tests; it's about evidence-based instruction.

- Establishing clear learning goal(s) and criteria for success
- Eliciting evidence about student learning
- Providing feedback to teachers and students about learning
- Using feedback to adjust instruction and learning tactics in real time
- Involving students actively in their learning



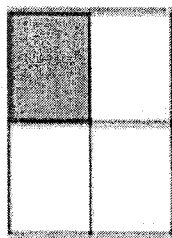
Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

13

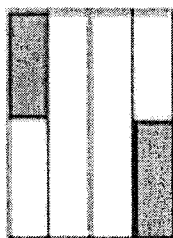




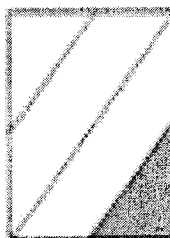
In which of the following diagrams is one quarter of the area shaded?



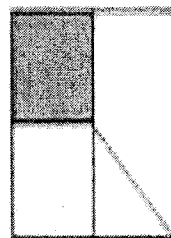
A



B



C

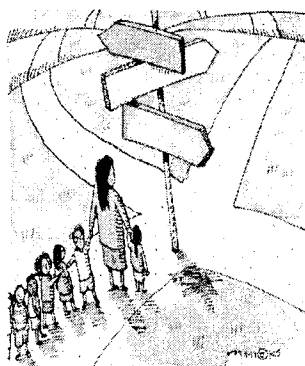


D

(William, 2006)



Adjusting Teaching and Learning



- What does my evidence tell me about my students' current learning status?
- Is there a gap between my students' current learning status and the desired goal? What is it? Do I need more evidence?
- Are my students on track to meeting the success criteria/have they met the success criteria?
- Are my students using feedback to adjust their learning?





Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

How does formative assessment help students learn?

- Gives students needed information
 - On the precise points they need to improve
- Keeps students on task
- Involves students in their own learning
- Yields significant learning gains when done well



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

17

How does formative assessment motivate students?

- Can foster
 - student self-regulation
 - student self-efficacy
 - student feelings of control over their own learning
- Can help struggling or reluctant students



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

18



Montana Office of Public Instruction
Denise Juneau Superintendent opi.mt.gov

How can we support Montana teachers to move learning forward?

- Ongoing professional development accessible to every teacher
- Ongoing learning communities available to every teacher even those in the most remote regions of the state
- Ongoing expert support and consultation when needed
- Resources



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

19

"I believe it can transform classroom culture and make a good teacher even better."

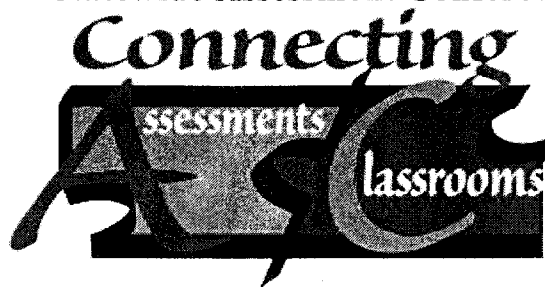
Superintendent Denise Juneau, *Great Falls Tribune*, January 31, 2009.



Montana Office of Public Instruction
Denise Juneau, Superintendent opi.mt.gov

20

OPI Statewide Assessment Conference



➔ indicates sessions focused
on formative assessment

Sunday, April 27, 2008

1:00 p.m. - 3:00 p.m.
Hotel Lobby

Late Registration and Pick Up Conference Packets

Monday, April 28, 2008

7:00 a.m. - 8:30 a.m.
Hotel Lobby

Late registration and Pick Up Conference Packets

7:30 a.m. - 8:30 a.m.
Ballroom

Breakfast - Sponsored by ACT, CTB/McGraw Hill, and OPI

8:30 am - 8:45 a.m.
Ballroom

Opening Remarks - Conference Kickoff

Judy Snow, Assessment Director

Linda McCulloch, Superintendent of Public Instruction

➔ 8:45 a.m. - 9:45 a.m.
Ballroom

Connecting Assessments and Classrooms: Formative Assessment
Dr. W. Jim Popham, Founder, IOX Assessment Associates

9:45 am-10:00 a.m.
Ballroom

Break - Sponsored by Measured Progress

➔ 10:00 a.m. - 11:10 a.m.
Judicial

Keynote Follow-up

10:00 a.m. - 11:10 a.m.
State

2008 National Rural Teacher of the Year

Susan Luinstra, Bynum Elementary

Susan received the well deserved honor of being named the 2008 National Rural Teacher of the Year. This session highlights the small rural school and the wonderful opportunities for learning. Join Susan for her inspiring presentation, "The Gift of a Rural School."

10:00 a.m. - 11:10 a.m.
Lewis

Essential Components of Writing Assessments

Carolee Gunn, Consultant

Purpose, format, and technical adequacy are important considerations in the design and implementation of a writing assessment program. This session will explore these considerations.

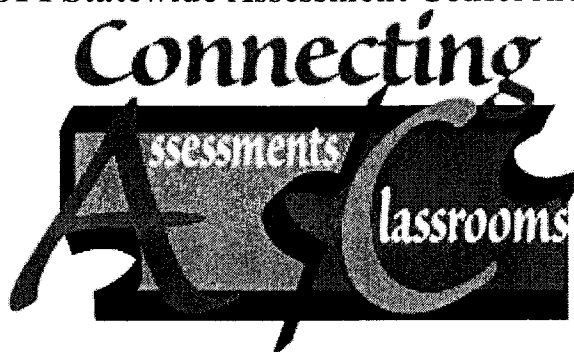
10:00 a.m. - 11:10 a.m.
Governor

NEPs, LEPs, and FEPs and the CRT (a few FYIs)

Eliza Sorte, NW Montana Education Cooperative

Don't get caught up on the acronyms while working with limited English proficient students. Come get some classroom assessment strategies, suggestions for modifications and accommodations, as well as a few tricks to help your limited English proficient students develop background knowledge about the Montana Criterion-Referenced Test (CRT).

OPI Statewide Assessment Conference



Monday, April 28, 2008
(continued)

➔ 10:00 a.m. – 11:10 a.m.
Clark

Using the NAEP Questions Tool for Constructing Classroom Assessments

Mike Chapman, OPI & Karma Nelson, CLTW

This presentation will concentrate on the creation of high-quality local classroom assessments through the use of the NAEP Questions Tool. Beyond giving teachers access to a nationally validated item bank, the tools also present them with powerful professional development opportunities. The audience will be given a complete handout of information used in a live demonstration of the Tool's capabilities. The demonstration will show how to access the tools, navigate through features, set criteria for item selection by subject, grade, and level of difficulty, copy items to a downloadable folder, view actual graded student responses with analytical comments by scorers, and interpret item-by-item statistics showing nationwide scoring percentages. Finally teachers will receive instruction and recommendations concerning best practices for incorporating the downloaded items into their own local assessments.

10:00 a.m. – 11:10 a.m.
Montana

Connecting Assessments and Instruction for Students Taking the CRT-Alt

Gail McGregor, University of Montana & Pam Green, Measured Progress

This session will focus on how information gained from the CRT-Alt can be used to guide program planning and instruction for students with severe cognitive disabilities. Participants will look at the report generated for students taking the CRT-Alt, and then consider the potential "mismatch" that may exist between a student's current instructional program and what is assessed by the CRT-Alt. Changing perspectives about curricular approaches for this population of students will be shared, along with examples of materials and lessons that enable students performing at basic levels in the areas of academic to work on standards-based skills that are included in Montana's Extended Standards and Benchmarks documents in the areas of reading, math, and science.

➔ 11:20 a.m. - 12:30 p.m.
Judicial

Formative Assessment Basics

Sue Brookhart, Brookhart Enterprises LLC

Formative Assessment is described as a cycle (learning goal – student work – assessment against the goal – improvement) best played out in classroom practices which will be identified and illustrated. The role of Benchmark or Interim assessments in informing instruction is also addressed.

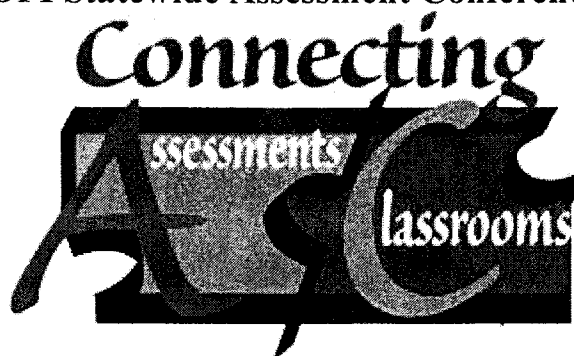
11:20 a.m. - 12:30 p.m.
State

CPS + CRT = SUCCESS

Dena Kirschten, Plevna Public Schools

This session will provide teachers and administrators the opportunity to observe how I have taken the CRT released questions and entered them in the Classroom Performance System. The entered questions can now be used in a brief review format, testing format, or jeopardy games for students to learn from. Teachers will see how using the technology will make preparing for "THE TEST" much easier and more enjoyable for students.

OPI Statewide Assessment Conference



**Monday, April 28, 2008
(continued)**

11:20a.m. – 12:30 p.m.
Lewis

Local Writing Assessment Panel

Dr. Carolee Gunn will moderate a panel of representatives of Montana schools that administer a local writing assessment. Topics will include purpose, format, grades, scoring, and reporting.

11:20 a.m. - 12:30 p.m.
Clark

Effectiveness Reports and the 5YCEP

Willy Schauman, OPI

Background information of the 5YCEP and where we go from here. The annual electronic effectiveness report. Why are we doing this?

11:20 a.m. - 12:30 p.m.
Montana

LEP Students in Montana

Lynn Hinch, OPI

A discussion of the identification and status of limited English proficient students in schools in Montana.

➔ 11:20 a.m. - 12:30 p.m.
Governor

Informative Assessment Strategies to Improve Student Learning

Karma Nelson, CLTW for Anne Keith, Bozeman Public Schools

Implementing informative assessment strategies in your school or district can raise student achievement 2 to 4 grade levels. Come learn practical ideas to use in your classrooms. Many of the ideas shared are from the experts at the Assessment Training Institute in Portland, Oregon.

12:30 p.m. – 1:30 p.m.
Ballroom

**Lunch - Sponsored by Infinite Campus
Montana City 7th and 8th Grade Band**

➔ 1:45 p.m. – 3:00 p.m.
Judicial

Focus Group 1

Dr. Stanley Rabinowitz, assisted by Montana educators, will provide guidance for focus groups to discuss future directions for Montana statewide assessment. The ideas from these groups will be incorporated in a survey of Montana educators in September 2008. This is an opportunity for Montana educators to consider several ideas which may include formative, local, and performance assessments and the next generation of the CRT. In order to ensure space in the focus group of your choice, please stop by the registration table to obtain a pass.

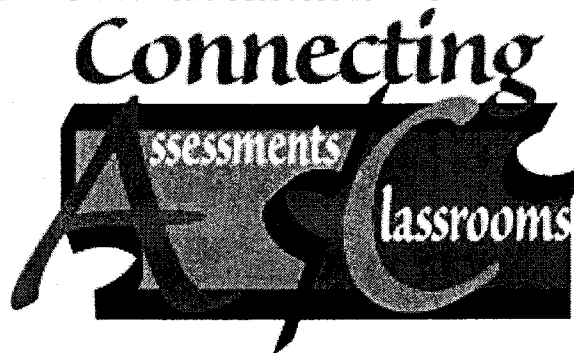
1:45 p.m. – 3:00 p.m.
State

Data Analysis and MARS (New *iAnalyze*)

Dan Verdick, Measured Progress

iAnalyze, the Measured Progress online reporting tool, has been improved and streamlined for the 2008 CRT and CRT-Alternate test results. The new name is **MARS** (Montana Analysis and Reporting System). This session will provide basic training for the use of **MARS**. It's out of this world.

OPI Statewide Assessment Conference



**Monday, April 28, 2008
(continued)**

1:45 p.m. – 3:00 p.m.
Lewis

Commercial Writing Assessment Panel

Dr. Linda Peterson will moderate a panel of representatives of testing companies to provide information on their off-the-shelf and/or customized writing assessments. Topics will include the research foundation for the assessments, formats, technical adequacy, scoring, reporting, and alignment with Montana Content Standards and Performance Descriptors.

1:45 p.m. – 3:00 p.m.
Clark

The Mysteries of AYP

BJ Granbery & Donna O'Neill, OPI

This session will help educators develop an understanding of what goes into the AYP calculations, how the coding in AIM determines the student groups and the other indicators, and the consequences of drawing incorrect premature conclusions from the data. .

➔ 1:45 p.m. – 3:00 p.m.
Montana

SMART Boards in the Classroom

Mike Agostinelli, Helena Public Schools

This session will focus on how you can integrate SMART Board into your classroom, boardroom, or office effectively. The main goal of this session is to demonstrate the possibilities that SMART Boards bring. Hands-on time with the SMART Board will be incorporated into the session.

1:45 p.m. – 3:00 p.m.
Governor

How to Grade for Learning

Karma Nelson, CLTW for Anne Keith, Bozeman Public Schools

Grading is a private practice not many teachers talk about. Grading experts offer many strategies for teachers that allow grading to promote rather than hinder learning. Be prepared to be uncomfortable as you examine your own grading practices. Many of the ideas shared are from the experts at the Assessment Training Institute in Portland, Oregon.

3:00 p.m. - 3:15 p.m.
Ballroom

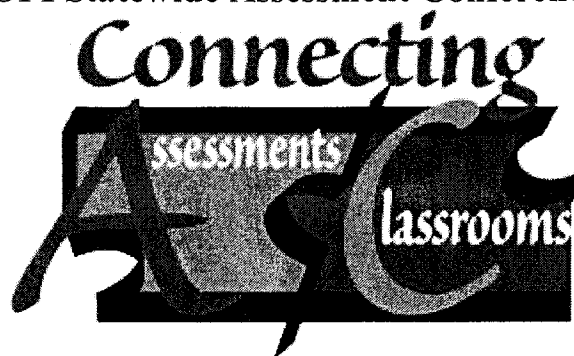
Break - Sponsored by Measured Progress

➔ 3:15 p.m. - 4:30 p.m.
Judicial

Focus Group 2

Dr. Stanley Rabinowitz, assisted by Montana educators, will provide guidance for focus groups to discuss future directions for Montana statewide assessment. The ideas from these groups will be incorporated in a survey of Montana educators in September 2008. This is an opportunity for Montana educators to consider several ideas which may include formative, local, and performance assessments and the next generation of the CRT. In order to ensure space in the focus group of your choice, please stop by the registration table to obtain a pass.

OPI Statewide Assessment Conference



Monday, April 28, 2008
(continued)

3:15 p.m. - 4:30 p.m.
State

Indian Education for All ... Assessing our Progress

Mike Jetty, OPI

Participants will gain a general overview of the latest curriculum and professional development initiatives to implement Indian Education for All. Ideas, resources and strategies for implementation and classroom/school assessment will be provided.

➔ 3:15 p.m. - 4:30 p.m.
Lewis

Formative Assessment Panel

Sue Brookhart, Moderator

Dr. Sue Brookhart will moderate a panel of representatives of testing companies to provide information on their products and services. Topics will include type of information derived from use of their products and services, instructional intervention suggestions, and alignment with Montana Content Standards and Performance Descriptors.

3:15 p.m. - 4:30 p.m.
Clark

Data Quality and AIM

Sara Loewen, OPI

OPI staff will discuss best practices for managing and reporting data to ensure data quality. Topics include discussion of data ownership roles and responsibilities, data verification practices of OPI, and training tools available to districts and their staff.

3:15 p.m. - 4:30 p.m.
Montana

Exporting and Reporting of CRT Achievement Data

Tracey Kinney, SFS Consulting & Associates

Learn how to: 1. Export CRT data to Excel for extending analysis and reporting alternatives; 2. Further analyze intervention needs for students after developing classroom or individual achievement profiles; 3. Design reports with Excel that are more appropriate for small schools, classrooms, or individual students.

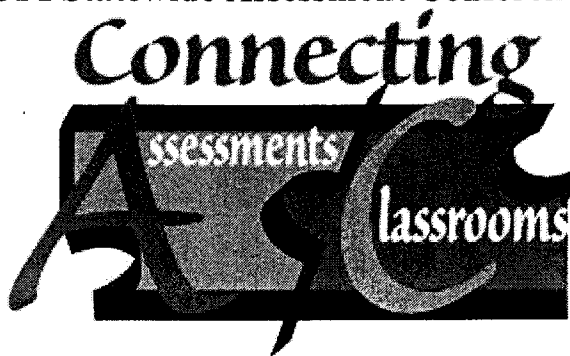
➔ 3:15 p.m. - 4:30 p.m.
Governor

Response to Intervention (RTI): The Montana Framework

Tara Ferriter-Smith, OPI

Interest in RTI has continued to increase as schools begin implementation. This session will outline the Montana RTI Framework, discuss the essential components for the implementation of RTI, and will discuss the complex implications for the role of general and special education as it relates to the implementation of RTI.

OPI Statewide Assessment Conference



Tuesday, April 29, 2008

7:00 a.m. - 8:30 a.m.
Hotel Lobby

Registration and Pick Up Conference Packets

7:30 a.m. - 8:30 a.m.
Ballroom

Breakfast - Sponsored by Riverside Publishing, Questar Assessment, Inc, and OPI

8:30 a.m. - 8:45 a.m.
Ballroom

Welcome

Judy Snow, Assessment Director

Bud Williams, Deputy Superintendent of Public Instruction

Dr. Scott Marion, Vice President, National Center for the Improvement in Educational Assessment, Inc.

Connecting Assessments and Classrooms: Interim Assessments

9:45 am - 10:00 a.m.
Ballroom

Break - Sponsored by Measured Progress

➔ 10:00 a.m. - 11:10 a.m.
Meadowlark

Keynote Follow-up

10:00 a.m. - 11:10 a.m.
State

Data Analysis and MARS (New *iAnalyze*)

Dan Verdick, Measured Progress

iAnalyze, the Measured Progress online reporting tool, has been improved and streamlined for the 2008 CRT and CRT-Alternate test results. The new name is **MARS** (Montana Analysis and Reporting System). This session will provide basic training for the use of **MARS**. It's out of this world.

10:00 a.m. - 11:10 a.m.
Lewis

MontCAS Update

Judy Snow, OPI

This session will provide an overview and update of the components of MontCAS.

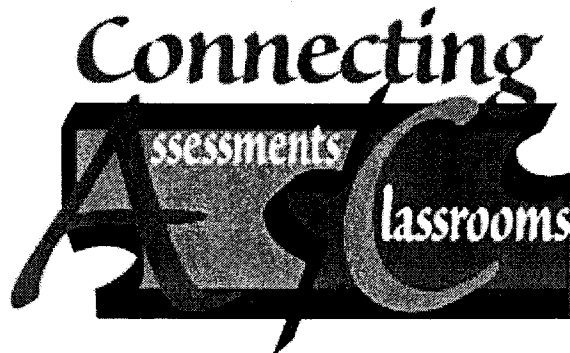
10:00 a.m. - 11:10 a.m.
Clark

Universal Design for Assessment: What Tomorrow Will Bring

Mike Russell, Boston College & Gail McGregor, University of Montana

This session will examine how computer-based technologies are being used to create universally designed assessments that meet the needs of individual students. Together, we will explore a cutting edge approach to assessment that integrates a variety of accommodations into a single assessment and provides students the flexibility needed to acquire a purer understanding of their learning. The session is a look into the future of student assessment and will provide participants with an understanding of how teachers and large-scale testing programs can easily adapt the assessment environment based on each individual student's need.

OPI Statewide Assessment Conference



**Tuesday, April 29, 2008
(continued)**

10:00 a.m. - 11:10 a.m.
Montana

Sustainable School Improvement

Jack O'Connor & Nancy Coleman, OPI

How to implement the school improvement process and keep it going in the schools. Nine Montana correlates and how they relate to the effective schools process.

10:00 a.m. - 11:10 a.m.
Governor

2008 National Rural Teacher of the Year

Susan Luinstra, Bynum Elementary

Susan received the well deserved honor of being named the 2008 National Rural Teacher of the Year. This session highlights the small rural school and the wonderful opportunities for learning. Join Susan for her inspiring presentation, "The Gift of a Rural School."

11:20 a.m. - 12:30 p.m.
State

Data Analysis and MARS (New *iAnalyze*)

Dan Verdick, Measured Progress

iAnalyze, the Measured Progress online reporting tool, has been improved and streamlined for the 2008 CRT and CRT-Alternate test results. The new name is **MARS** (Montana Analysis and Reporting System). This session will provide basic training for the use of **MARS**. It's out of this world.

11:20 a.m. - 12:30 p.m.
Lewis

How to Include All Students in MontCAS

Phil Robakiewicz, Measured Progress

The Montana Comprehensive Assessment system provides a variety of methods for including all students. This session will focus on those methods including current research through two grants to study assessment based on modified achievement standards. One grant will target high school reading; the other will focus on grades 7 and 8 math and reading. Opportunities for participation in the research will be presented.

11:20 a.m. - 12:30 p.m.
Clark

AIM Update

Madalyn Quinlan, OPI

This session will explore the current status and future plans of the Achievement in Montana (AIM) Student Information System.

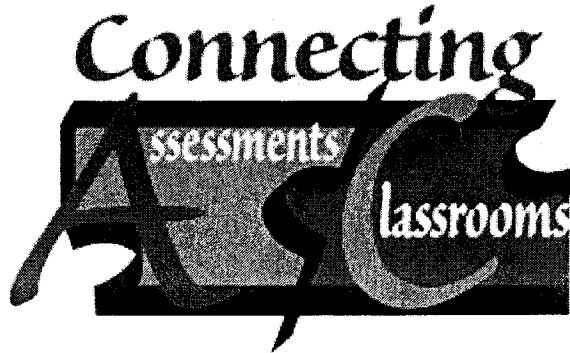
11:20 a.m. - 12:30 p.m.
Montana

ELP Assessment: Administration and Results

Karen Richem, OPI

This session will examine the ELP Assessment administration and results. We will talk about the upcoming assessment in the fall, especially the timeline for having student information in AIM.

OPI Statewide Assessment Conference



**Tuesday, April 29, 2008
(continued)**

➔ 11:20 a.m. - 12:30 p.m.
Governor

Using Common Assessments as Formative Assessments to Raise Student Achievement Through Grade Level Professional Learning Communities
Karma Nelson, CLTW, Annette Moody & Susie Bollinger, Hardin Public Schools
These presenters will share their efforts to establish grade level professional learning communities through the use of formative assessments to increase students' achievement in mathematics. Teachers establish trust and grow professionally when they are offered the opportunity to engage in professional learning communities (in this case designing and scoring assessments based on data). Unlike summative assessments, formative assessments involve students in their own learning through extensive descriptive feedback and inform teachers' instructional decisions. Research shows the impact on student achievement through the use of formative assessments.

11:20 a.m. - 12:30 p.m.
Bitterroot

LEP Students in Montana
Lynn Hinch, OPI
A discussion of the identification and status of limited English proficient students in schools in Montana.

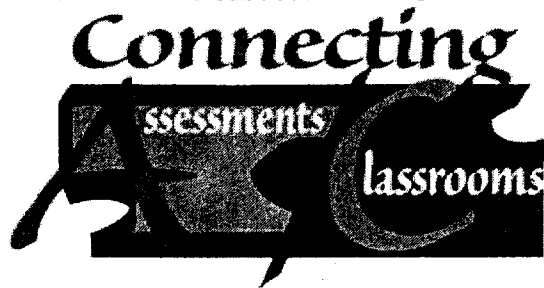
12:30 - 1:30 p.m.
Ballroom

Lunch - Sponsored by Data Recognition Corp. and OPI

1:30 p.m.

Conference Adjourned

OPI Statewide Assessment Conference



➔ indicates sessions focused
on formative assessment

Sunday, April 27, 2008

1:00 p.m. - 3:00 p.m.
Hotel Lobby

Late Registration and Pick Up Conference Packets

Monday, April 28, 2008

7:00 a.m. - 8:30 a.m.
Hotel Lobby

Late registration and Pick Up Conference Packets

7:30 a.m. - 8:30 a.m.
Ballroom

Breakfast - Sponsored by ACT, CTB/McGraw Hill, and OPI

8:30 am - 8:45 a.m.
Ballroom

Opening Remarks - Conference Kickoff
Judy Snow, Assessment Director
Linda McCulloch, Superintendent of Public Instruction

➔ 8:45 a.m. - 9:45 a.m.
Ballroom

Connecting Assessments and Classrooms: Formative Assessment
Dr. W. Jim Popham, Founder, IOX Assessment Associates

9:45 am-10:00 a.m.
Ballroom

Break - Sponsored by Measured Progress

➔ 10:00 a.m. - 11:10 a.m.
Judicial

Keynote Follow-up

10:00 a.m. - 11:10 a.m.
State

2008 National Rural Teacher of the Year
Susan Luinstra, Bynum Elementary
Susan received the well deserved honor of being named the 2008 National Rural Teacher of the Year. This session highlights the small rural school and the wonderful opportunities for learning. Join Susan for her inspiring presentation, "The Gift of a Rural School."

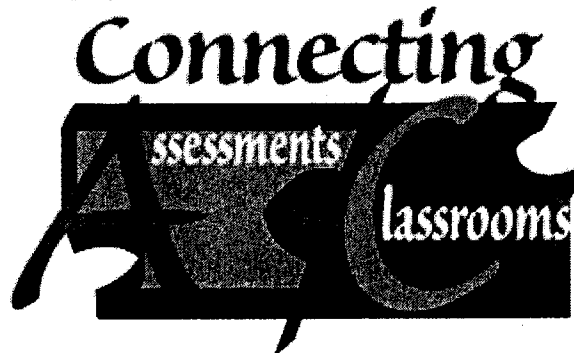
10:00 a.m. - 11:10 a.m.
Lewis

Essential Components of Writing Assessments
Carolee Gunn, Consultant
Purpose, format, and technical adequacy are important considerations in the design and implementation of a writing assessment program. This session will explore these considerations.

10:00 a.m. - 11:10 a.m.
Governor

NEPs, LEPs, and FEPs and the CRT (a few FYIs)
Eliza Sorte, NW Montana Education Cooperative
Don't get caught up on the acronyms while working with limited English proficient students. Come get some classroom assessment strategies, suggestions for modifications and accommodations, as well as a few tricks to help your limited English proficient students develop background knowledge about the Montana Criterion-Referenced Test (CRT).

OPI Statewide Assessment Conference



Monday, April 28, 2008
(continued)

➔ 10:00 a.m. – 11:10 a.m.
Clark

Using the NAEP Questions Tool for Constructing Classroom Assessments

Mike Chapman, OPI & Karma Nelson, CLTW

This presentation will concentrate on the creation of high-quality local classroom assessments through the use of the NAEP Questions Tool. Beyond giving teachers access to a nationally validated item bank, the tools also present them with powerful professional development opportunities. The audience will be given a complete handout of information used in a live demonstration of the Tool's capabilities. The demonstration will show how to access the tools, navigate through features, set criteria for item selection by subject, grade, and level of difficulty, copy items to a downloadable folder, view actual graded student responses with analytical comments by scorers, and interpret item-by-item statistics showing nationwide scoring percentages. Finally teachers will receive instruction and recommendations concerning best practices for incorporating the downloaded items into their own local assessments.

10:00 a.m. – 11:10 a.m.
Montana

Connecting Assessments and Instruction for Students Taking the CRT-Alt

Gail McGregor, University of Montana & Pam Green, Measured Progress

This session will focus on how information gained from the CRT-Alt can be used to guide program planning and instruction for students with severe cognitive disabilities. Participants will look at the report generated for students taking the CRT-Alt, and then consider the potential "mismatch" that may exist between a student's current instructional program and what is assessed by the CRT-Alt. Changing perspectives about curricular approaches for this population of students will be shared, along with examples of materials and lessons that enable students performing at basic levels in the areas of academic to work on standards-based skills that are included in Montana's Extended Standards and Benchmarks documents in the areas of reading, math, and science.

➔ 11:20 a.m. - 12:30 p.m.
Judicial

Formative Assessment Basics

Sue Brookhart, Brookhart Enterprises LLC

Formative Assessment is described as a cycle (learning goal – student work – assessment against the goal – improvement) best played out in classroom practices which will be identified and illustrated. The role of Benchmark or Interim assessments in informing instruction is also addressed.

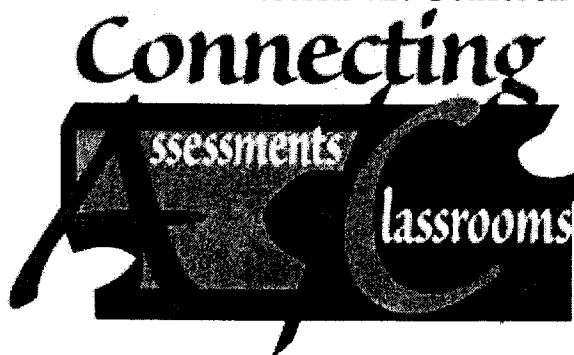
11:20 a.m. - 12:30 p.m.
State

CPS + CRT = SUCCESS

Dena Kirschten, Plevna Public Schools

This session will provide teachers and administrators the opportunity to observe how I have taken the CRT released questions and entered them in the Classroom Performance System. The entered questions can now be used in a brief review format, testing format, or jeopardy games for students to learn from. Teachers will see how using the technology will make preparing for "THE TEST" much easier and more enjoyable for students.

OPI Statewide Assessment Conference



Monday, April 28, 2008
(continued)

11:20a.m. – 12:30 p.m.
Lewis

Local Writing Assessment Panel

Dr. Carolee Gunn will moderate a panel of representatives of Montana schools that administer a local writing assessment. Topics will include purpose, format, grades, scoring, and reporting.

11:20 a.m. - 12:30 p.m.
Clark

Effectiveness Reports and the 5YCEP

Willy Schauman, OPI

Background information of the 5YCEP and where we go from here. The annual electronic effectiveness report. Why are we doing this?

11:20 a.m. - 12:30 p.m.
Montana

LEP Students in Montana

Lynn Hinch, OPI

A discussion of the identification and status of limited English proficient students in schools in Montana.

➔ 11:20 a.m. - 12:30 p.m.
Governor

Informative Assessment Strategies to Improve Student Learning

Karma Nelson, CLTW for Anne Keith, Bozeman Public Schools

Implementing informative assessment strategies in your school or district can raise student achievement 2 to 4 grade levels. Come learn practical ideas to use in your classrooms. Many of the ideas shared are from the experts at the Assessment Training Institute in Portland, Oregon.

12:30 p.m. – 1:30 p.m.
Ballroom

Lunch - Sponsored by Infinite Campus

Montana City 7th and 8th Grade Band

➔ 1:45 p.m. – 3:00 p.m.
Judicial

Focus Group 1

Dr. Stanley Rabinowitz, assisted by Montana educators, will provide guidance for focus groups to discuss future directions for Montana statewide assessment. The ideas from these groups will be incorporated in a survey of Montana educators in September 2008. This is an opportunity for Montana educators to consider several ideas which may include formative, local, and performance assessments and the next generation of the CRT. In order to ensure space in the focus group of your choice, please stop by the registration table to obtain a pass.

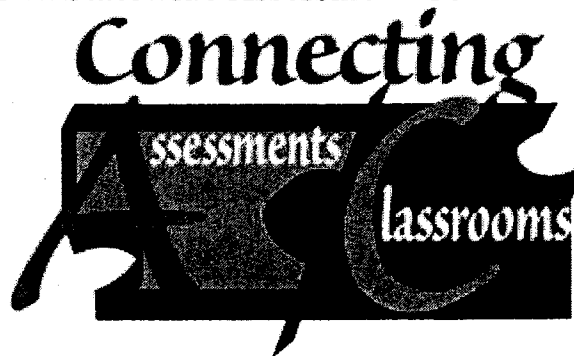
1:45 p.m. – 3:00 p.m.
State

Data Analysis and MARS (New *iAnalyze*)

Dan Verdick, Measured Progress

iAnalyze, the Measured Progress online reporting tool, has been improved and streamlined for the 2008 CRT and CRT-Alternate test results. The new name is **MARS** (Montana Analysis and Reporting System). This session will provide basic training for the use of **MARS**. It's out of this world.

OPI Statewide Assessment Conference



Monday, April 28, 2008
(continued)

1:45 p.m. – 3:00 p.m.
Lewis

Commercial Writing Assessment Panel

Dr. Linda Peterson will moderate a panel of representatives of testing companies to provide information on their off-the-shelf and/or customized writing assessments. Topics will include the research foundation for the assessments, formats, technical adequacy, scoring, reporting, and alignment with Montana Content Standards and Performance Descriptors.

1:45 p.m. – 3:00 p.m.
Clark

The Mysteries of AYP

BJ Granbery & Donna O'Neill, OPI

This session will help educators develop an understanding of what goes into the AYP calculations, how the coding in AIM determines the student groups and the other indicators, and the consequences of drawing incorrect premature conclusions from the data.

➔ 1:45 p.m. – 3:00 p.m.
Montana

SMART Boards in the Classroom

Mike Agostinelli, Helena Public Schools

This session will focus on how you can integrate SMART Board into your classroom, boardroom, or office effectively. The main goal of this session is to demonstrate the possibilities that SMART Boards bring. Hands-on time with the SMART Board will be incorporated into the session.

1:45 p.m. – 3:00 p.m.
Governor

How to Grade for Learning

Karma Nelson, CLTW for Anne Keith, Bozeman Public Schools

Grading is a private practice not many teachers talk about. Grading experts offer many strategies for teachers that allow grading to promote rather than hinder learning. Be prepared to be uncomfortable as you examine your own grading practices. Many of the ideas shared are from the experts at the Assessment Training Institute in Portland, Oregon.

3:00 p.m. – 3:15 p.m.
Ballroom

Break - Sponsored by Measured Progress

➔ 3:15 p.m. – 4:30 p.m.
Judicial

Focus Group 2

Dr. Stanley Rabinowitz, assisted by Montana educators, will provide guidance for focus groups to discuss future directions for Montana statewide assessment. The ideas from these groups will be incorporated in a survey of Montana educators in September 2008. This is an opportunity for Montana educators to consider several ideas which may include formative, local, and performance assessments and the next generation of the CRT. In order to ensure space in the focus group of your choice, please stop by the registration table to obtain a pass.

OPI Statewide Assessment Conference



Monday, April 28, 2008
(continued)

3:15 p.m. - 4:30 p.m.
State

Indian Education for All ... Assessing our Progress

Mike Jetty, OPI

Participants will gain a general overview of the latest curriculum and professional development initiatives to implement Indian Education for All. Ideas, resources and strategies for implementation and classroom/school assessment will be provided.

➔ 3:15 p.m. - 4:30 p.m.
Lewis

Formative Assessment Panel

Sue Brookhart, Moderator

Dr. Sue Brookhart will moderate a panel of representatives of testing companies to provide information on their products and services. Topics will include type of information derived from use of their products and services, instructional intervention suggestions, and alignment with Montana Content Standards and Performance Descriptors.

3:15 p.m. - 4:30 p.m.
Clark

Data Quality and AIM

Sara Loewen, OPI

OPI staff will discuss best practices for managing and reporting data to ensure data quality. Topics include discussion of data ownership roles and responsibilities, data verification practices of OPI, and training tools available to districts and their staff.

3:15 p.m. - 4:30 p.m.
Montana

Exporting and Reporting of CRT Achievement Data

Tracey Kinney, SFS Consulting & Associates

Learn how to: 1. Export CRT data to Excel for extending analysis and reporting alternatives; 2. Further analyze intervention needs for students after developing classroom or individual achievement profiles; 3. Design reports with Excel that are more appropriate for small schools, classrooms, or individual students.

➔ 3:15 p.m. - 4:30 p.m.
Governor

Response to Intervention (RTI): The Montana Framework

Tara Ferriter-Smith, OPI

Interest in RTI has continued to increase as schools begin implementation. This session will outline the Montana RTI Framework, discuss the essential components for the implementation of RTI, and will discuss the complex implications for the role of general and special education as it relates to the implementation of RTI.

OPI Statewide Assessment Conference



Tuesday, April 29, 2008

7:00 a.m. - 8:30 a.m.
Hotel Lobby

Registration and Pick Up Conference Packets

7:30 a.m. - 8:30 a.m.
Ballroom

Breakfast - Sponsored by Riverside Publishing, Questar Assessment, Inc, and OPI

8:30 a.m. - 8:45 a.m.
Ballroom

Welcome
Judy Snow, Assessment Director
Bud Williams, Deputy Superintendent of Public Instruction

➔ 8:45 am - 9:45 a.m.
Ballroom

Dr. Scott Marion, Vice President, National Center for the Improvement in Educational Assessment, Inc.
Connecting Assessments and Classrooms: Interim Assessments

9:45 am - 10:00 a.m.
Ballroom

Break - Sponsored by Measured Progress

➔ 10:00 a.m. - 11:10 a.m.
Meadowlark

Keynote Follow-up

10:00 a.m. - 11:10 a.m.
State

Data Analysis and MARS (New *iAnalyze*)

Dan Verdick, Measured Progress
iAnalyze, the Measured Progress online reporting tool, has been improved and streamlined for the 2008 CRT and CRT-Alternate test results. The new name is **MARS** (Montana Analysis and Reporting System). This session will provide basic training for the use of **MARS**. It's out of this world.

10:00 a.m. - 11:10 a.m.
Lewis

MontCAS Update

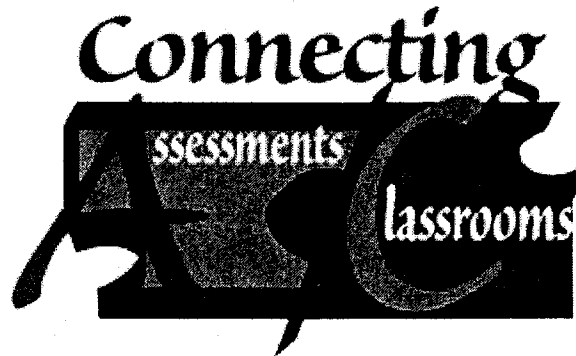
Judy Snow, OPI
This session will provide an overview and update of the components of MontCAS.

10:00 a.m. - 11:10 a.m.
Clark

Universal Design for Assessment: What Tomorrow Will Bring

Mike Russell, Boston College & Gail McGregor, University of Montana
This session will examine how computer-based technologies are being used to create universally designed assessments that meet the needs of individual students. Together, we will explore a cutting edge approach to assessment that integrates a variety of accommodations into a single assessment and provides students the flexibility needed to acquire a purer understanding of their learning. The session is a look into the future of student assessment and will provide participants with an understanding of how teachers and large-scale testing programs can easily adapt the assessment environment based on each individual student's need.

OPI Statewide Assessment Conference



**Tuesday, April 29, 2008
(continued)**

10:00 a.m. - 11:10 a.m.
Montana

Sustainable School Improvement

Jack O'Connor & Nancy Coleman, OPI

How to implement the school improvement process and keep it going in the schools. Nine Montana correlates and how they relate to the effective schools process.

10:00 a.m. - 11:10 a.m.
Governor

2008 National Rural Teacher of the Year

Susan Luinstra, Bynum Elementary

Susan received the well deserved honor of being named the 2008 National Rural Teacher of the Year. This session highlights the small rural school and the wonderful opportunities for learning. Join Susan for her inspiring presentation, "The Gift of a Rural School."

11:20 a.m. - 12:30 p.m.
State

Data Analysis and MARS (New *iAnalyze*)

Dan Verdick, Measured Progress

iAnalyze, the Measured Progress online reporting tool, has been improved and streamlined for the 2008 CRT and CRT-Alternate test results. The new name is **MARS** (Montana Analysis and Reporting System). This session will provide basic training for the use of **MARS**. It's out of this world.

11:20 a.m. - 12:30 p.m.
Lewis

How to Include All Students in MontCAS

Phil Robakiewicz, Measured Progress

The Montana Comprehensive Assessment system provides a variety of methods for including all students. This session will focus on those methods including current research through two grants to study assessment based on modified achievement standards. One grant will target high school reading; the other will focus on grades 7 and 8 math and reading. Opportunities for participation in the research will be presented.

11:20 a.m. - 12:30 p.m.
Clark

AIM Update

Madalyn Quinlan, OPI

This session will explore the current status and future plans of the Achievement in Montana (AIM) Student Information System.

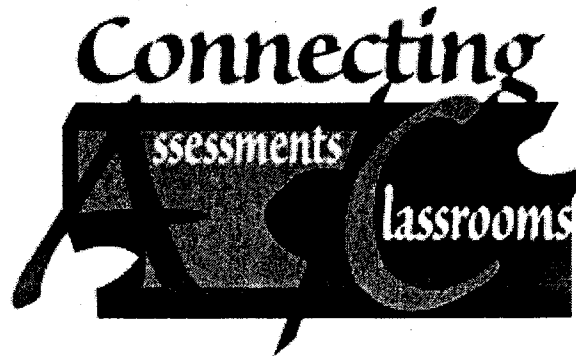
11:20 a.m. - 12:30 p.m.
Montana

ELP Assessment: Administration and Results

Karen Richem, OPI

This session will examine the ELP Assessment administration and results. We will talk about the upcoming assessment in the fall, especially the timeline for having student information in AIM.

OPI Statewide Assessment Conference



**Tuesday, April 29, 2008
(continued)**

➔ **11:20 a.m. - 12:30 p.m.**
Governor

Using Common Assessments as Formative Assessments to Raise Student Achievement Through Grade Level Professional Learning Communities
Karma Nelson, CLTW, Annette Moody & Susie Bollinger, Hardin Public Schools
These presenters will share their efforts to establish grade level professional learning communities through the use of formative assessments to increase students' achievement in mathematics. Teachers establish trust and grow professionally when they are offered the opportunity to engage in professional learning communities (in this case designing and scoring assessments based on data). Unlike summative assessments, formative assessments involve students in their own learning through extensive descriptive feedback and inform teachers' instructional decisions. Research shows the impact on student achievement through the use of formative assessments.

11:20 a.m. - 12:30 p.m.
Bitterroot

LEP Students in Montana
Lynn Hinch, OPI
A discussion of the identification and status of limited English proficient students in schools in Montana.

12:30 - 1:30 p.m.
Ballroom

Lunch - Sponsored by Data Recognition Corp. and OPI

1:30 p.m.

Conference Adjourned

Inside the Black Box

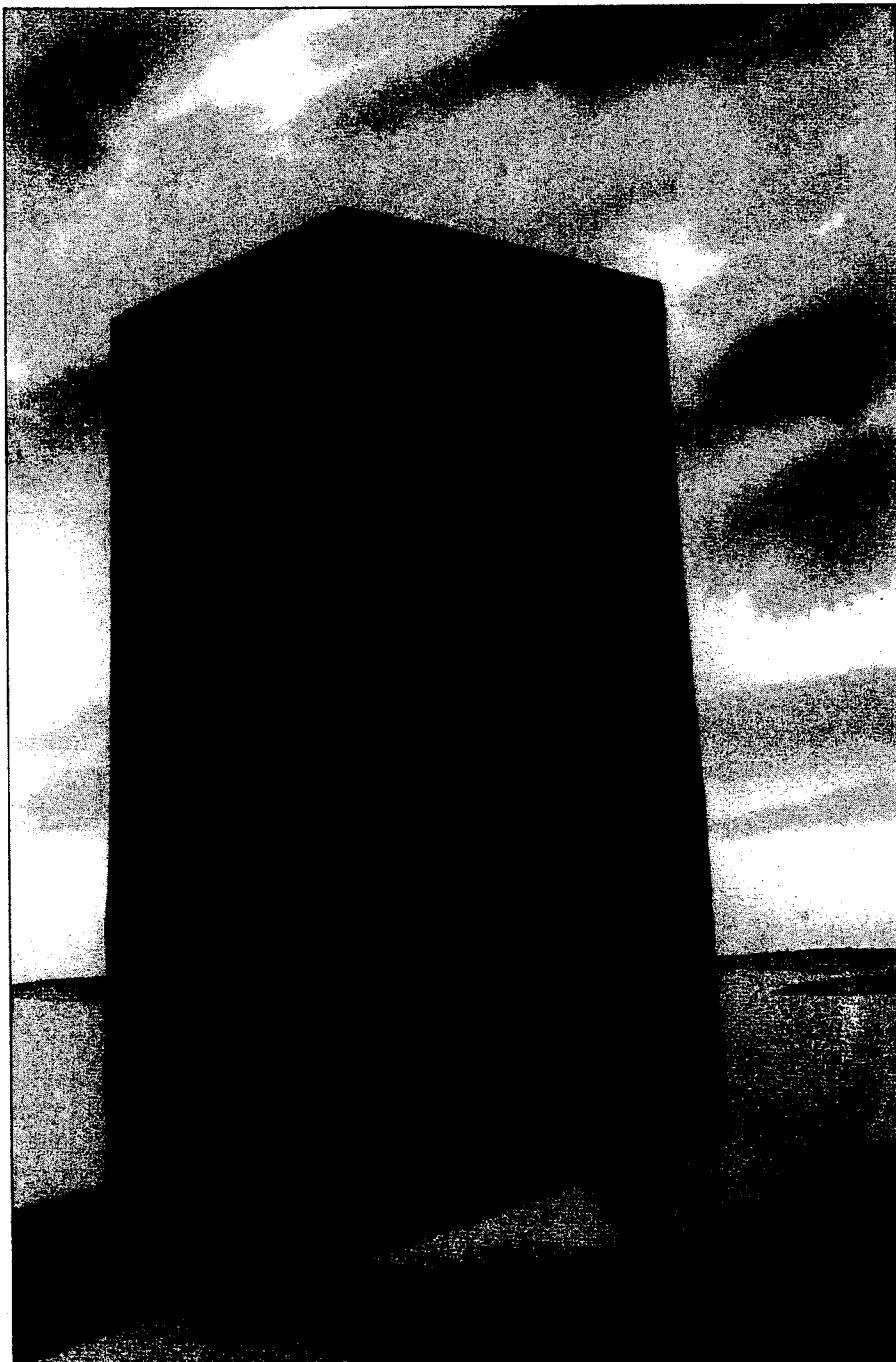
Raising Standards Through Classroom Assessment

BY PAUL BLACK AND
DYLAN WILIAM

Firm evidence shows that formative assessment is an essential component of classroom work and that its development can raise standards of achievement, Mr. Black and Mr. Wiliam point out. Indeed, they know of no other way of raising standards for which such a strong prima facie case can be made.

RAISING the standards of learning that are achieved through schooling is an important national priority. In recent years, governments throughout the world have been more and more vigorous in making changes in pursuit of this aim. National, state, and district standards; target setting; enhanced programs for the external testing of students' performance; surveys such as NAEP (National Assessment of Educational Progress) and TIMSS (Third International Mathematics and Science Study); initiatives to improve school plan-

PAUL BLACK is professor emeritus in the School of Education, King's College, London, where DYLAN WILIAM is head of school and professor of educational assessment.



ning and management; and more frequent and thorough inspection are all means toward the same end. But the sum of all these reforms has not added up to an effective policy because something is missing.

Learning is driven by what teachers and pupils do in classrooms. Teachers have to manage complicated and demanding situations, channeling the personal, emotional, and social pressures of a group of 30 or more youngsters in order to help them learn immediately and become better learners in the future. Standards can be raised only if teachers can tackle this task more effectively. What is missing from the efforts alluded to above is any direct help with this task. This fact was recognized in the TIMSS video study: "A focus on standards and accountability that ignores the processes of teaching and learning in classrooms will not provide the direction that teachers need in their quest to improve."¹

In terms of systems engineering, present policies in the U.S. and in many other countries seem to treat the classroom as a black box. Certain *inputs* from the outside — pupils, teachers, other resources, management rules and requirements, parental anxieties, standards, tests with high stakes, and so on — are fed into the box. Some *outputs* are supposed to follow: pupils who are more knowledgeable and competent, better test results, teachers who are reasonably satisfied, and so on. But what is happening inside the box? How can anyone be sure that a particular set of new inputs will produce better outputs if we don't at least study what happens inside? And why is it that most of the reform initiatives mentioned in the first paragraph are not aimed at giving direct help and support to the work of teachers in classrooms?

The answer usually given is that it is up to teachers: they have to make the inside work better. This answer is not good enough, for two reasons. First, it is at least possible that some changes in the inputs may be counterproductive and make it harder for teachers to raise standards. Second, it seems strange, even unfair, to leave the most difficult piece of the standards-raising puzzle entirely to teachers. If there are ways in which policy makers and others can give direct help and support to the everyday classroom task of achieving better learning, then surely these ways ought to be pursued vigorously.

This article is about the inside of the black box. We focus on one aspect of teach-

ing: formative assessment. But we will show that this feature is at the heart of effective teaching.

The Argument

We start from the self-evident proposition that teaching and learning must be interactive. Teachers need to know about their pupils' progress and difficulties with learning so that they can adapt their own work to meet pupils' needs — needs that are often unpredictable and that vary from one pupil to another. Teachers can find out what they need to know in a variety of ways, including observation and discussion in the classroom and the reading of pupils' written work.

We use the general term *assessment* to refer to all those activities undertaken by teachers — and by their students in assessing themselves — that provide information to be used as feedback to modify teaching and learning activities. Such assessment becomes *formative assessment* when the evidence is actually used to adapt the teaching to meet student needs.²

There is nothing new about any of this. All teachers make assessments in every class they teach. But there are three important questions about this process that we seek to answer:

- Is there evidence that improving formative assessment raises standards?
- Is there evidence that there is room for improvement?
- Is there evidence about how to improve formative assessment?

In setting out to answer these questions, we have conducted an extensive survey of the research literature. We have checked through many books and through the past nine years' worth of issues of more than 160 journals, and we have studied earlier reviews of research. This process yielded about 580 articles or chapters to study. We prepared a lengthy review, using material from 250 of these sources, that has been published in a special issue of the journal *Assessment in Education*, together with comments on our work by leading educational experts from Australia, Switzerland, Hong Kong, Lesotho, and the U.S.³

The conclusion we have reached from our research review is that the answer to each of the three questions above is clearly yes. In the three main sections below, we outline the nature and force of the evidence that justifies this conclusion. However, because we are presenting a sum-

mary here, our text will appear strong on assertions and weak on the details of their justification. We maintain that these assertions are backed by evidence and that this backing is set out in full detail in the lengthy review on which this article is founded.

We believe that the three sections below establish a strong case that *governments, their agencies, school authorities, and the teaching profession should study very carefully whether they are seriously interested in raising standards in education*. However, we also acknowledge widespread evidence that fundamental change in education can be achieved only slowly — through programs of professional development that build on existing good practice. Thus we do not conclude that formative assessment is yet another "magic bullet" for education. The issues involved are too complex and too closely linked to both the difficulties of classroom practice and the beliefs that drive public policy. In a final section, we confront this complexity and try to sketch out a strategy for acting on our evidence.

Does Improving Formative Assessment Raise Standards?

A research review published in 1986, concentrating primarily on classroom assessment work for children with mild handicaps, surveyed a large number of innovations, from which 23 were selected.⁴ Those chosen satisfied the condition that quantitative evidence of learning gains was obtained, both for those involved in the innovation and for a similar group not so involved. Since then, many more papers have been published describing similarly careful quantitative experiments. Our own review has selected at least 20 more studies. (The number depends on how rigorous a set of selection criteria are applied.) All these studies show that innovations that include strengthening the practice of formative assessment produce significant and often substantial learning gains. These studies range over age groups from 5-year-olds to university undergraduates, across several school subjects, and over several countries.

For research purposes, learning gains of this type are measured by comparing the average improvements in the test scores of pupils involved in an innovation with the range of scores that are found for typical groups of pupils on these same tests.

The ratio of the former divided by the latter is known as the *effect size*. Typical effect sizes of the formative assessment experiments were between 0.4 and 0.7. These effect sizes are larger than most of those found for educational interventions. The following examples illustrate some practical consequences of such large gains.

- An effect size of 0.4 would mean that the average pupil involved in an innovation would record the same achievement as a pupil in the top 35% of those not so involved.

- An effect size gain of 0.7 in the recent international comparative studies in mathematics⁵ would have raised the score of a nation in the middle of the pack of 41 countries (e.g., the U.S.) to one of the top five.

Many of these studies arrive at another important conclusion: that improved formative assessment helps low achievers more than other students and so reduces the range of achievement while raising achievement overall. A notable recent example is a study devoted entirely to low-achieving students and students with learning disabilities, which shows that frequent assessment feedback helps both groups enhance their learning.⁶ Any gains for such pupils could be partic-

ularly important. Furthermore, pupils who come to see themselves as unable to learn usually cease to take school seriously. Many become disruptive; others resort to truancy. Such young people are likely to be alienated from society and to become the sources and the victims of serious social problems.

Thus it seems clear that very significant learning gains lie within our grasp. The fact that such gains have been achieved by a variety of methods that have, as a common feature, enhanced formative assessment suggests that this feature accounts, at least in part, for the successes. However, it does not follow that it would be an easy matter to achieve such gains on a wide scale in normal classrooms. Many of the reports we have studied raise a number of other issues.

- All such work involves new ways to enhance feedback between those taught and the teacher, ways that will require significant changes in classroom practice.

- Underlying the various approaches are assumptions about what makes for effective learning — in particular the assumption that students have to be actively involved.

- For assessment to function formative-

ly, the results have to be used to adjust teaching and learning; thus a significant aspect of any program will be the ways in which teachers make these adjustments.

- The ways in which assessment can affect the motivation and self-esteem of pupils and the benefits of engaging pupils in self-assessment deserve careful attention.

Is There Room for Improvement?

A poverty of practice. There is a wealth of research evidence that the everyday practice of assessment in classrooms is beset with problems and shortcomings, as the following selected quotations indicate.

- "Marking is usually conscientious but often fails to offer guidance on how work can be improved. In a significant minority of cases, marking reinforces underachievement and underexpectation by being too generous or unfocused. Information about pupil performance received by the teacher is insufficiently used to inform subsequent work," according to a United Kingdom inspection report on secondary schools.⁷

- "Why is the extent and nature of formative assessment in science so impoverished?" asked a research study on secondary science teachers in the United Kingdom.⁸

- "Indeed they pay lip service to [formative assessment] but consider that its practice is unrealistic in the present educational context," reported a study of Canadian secondary teachers.⁹

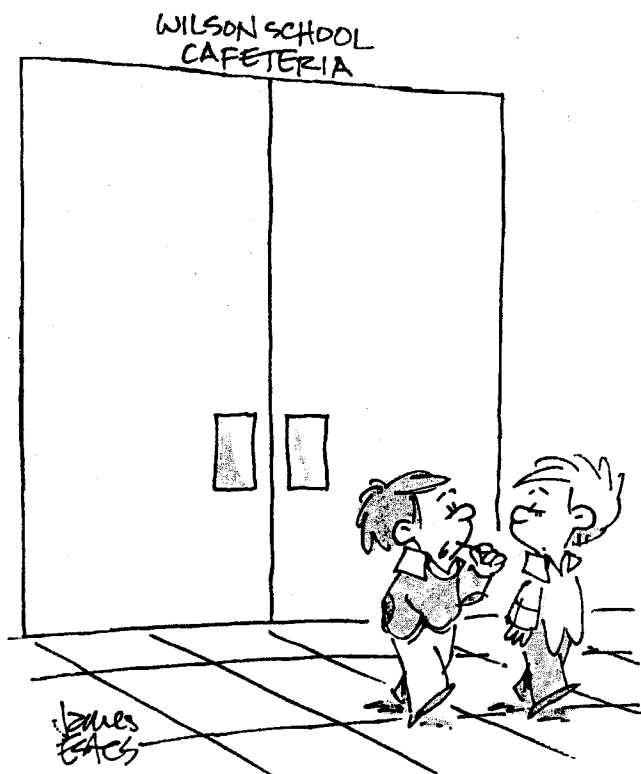
- "The assessment practices outlined above are not common, even though these kinds of approaches are now widely promoted in the professional literature," according to a review of assessment practices in U.S. schools.¹⁰

The most important difficulties with assessment revolve around three issues. The first issue is *effective learning*.

- The tests used by teachers encourage rote and superficial learning even when teachers say they want to develop understanding; many teachers seem unaware of the inconsistency.

- The questions and other methods teachers use are not shared with other teachers in the same school, and they are not critically reviewed in relation to what they actually assess.

- For primary teachers particularly, there is a tendency to emphasize quantity and presentation of work and to neglect its



"The food's really not half bad, but the atmosphere leaves a lot to be desired."

The ultimate user of assessment information that is elicited in order to improve learning is the pupil.

quality in relation to learning.

The second issue is *negative impact*.

- The giving of marks and the grading function are overemphasized, while the giving of useful advice and the learning function are underemphasized.

- Approaches are used in which pupils are compared with one another, the prime purpose of which seems to them to be competition rather than personal improvement; in consequence, assessment feedback teaches low-achieving pupils that they lack "ability," causing them to come to believe that they are not able to learn.

The third issue is the *managerial role* of assessments.

- Teachers' feedback to pupils seems to serve social and managerial functions, often at the expense of the learning function.

- Teachers are often able to predict pupils' results on external tests because their own tests imitate them, but at the same time teachers know too little about their pupils' learning needs.

- The collection of marks to fill in records is given higher priority than the analysis of pupils' work to discern learning needs; furthermore, some teachers pay no attention to the assessment records of their pupils' previous teachers.

Of course, not all these descriptions apply to all classrooms. Indeed, there are many schools and classrooms to which they do not apply at all. Nevertheless, these general conclusions have been drawn by researchers who have collected evidence — through observation, interviews, and questionnaires — from schools in several countries, including the U.S.

An empty commitment. The development of national assessment policy in England and Wales over the last decade illustrates the obstacles that stand in the way of developing policy support for formative assessment. The recommendations of a government task force in 1988¹¹ and all subsequent statements of government policy have emphasized the importance of formative assessment by teachers. However, the body charged with carrying out government policy on assessment had no strategy either to study or to develop the formative assessment of teachers and did

no more than devote a tiny fraction of its resources to such work.¹² Most of the available resources and most of the public and political attention were focused on national external tests. While teachers' contributions to these "summative assessments" have been given some formal status, hardly any attention has been paid to their contributions through formative assessment. Moreover, the problems of the relationship between teachers' formative and summative roles have received no attention.

It is possible that many of the commitments were stated in the belief that formative assessment was not problematic, that it already happened all the time and needed no more than formal acknowledgment of its existence. However, it is also clear that the political commitment to external testing in order to promote competition had a central priority, while the commitment to formative assessment was marginal. As researchers the world over have found, high-stakes external tests always dominate teaching and assessment. However, they give teachers poor models for formative assessment because of their limited function of providing overall summaries of achievement rather than helpful diagnosis. Given this fact, it is hardly surprising that numerous research studies of the implementation of the education reforms in the United Kingdom have found that formative assessment is "seriously in need of development."¹³ With hindsight, we can see that the failure to perceive the need for substantial support for formative assessment and to take responsibility for developing such support was a serious error.

In the U.S. similar pressures have been felt from political movements characterized by a distrust of teachers and a belief that external testing will, on its own, improve learning. Such fractured relationships between policy makers and the teaching profession are not inevitable — indeed, many countries with enviable educational achievements seem to manage well with policies that show greater respect and support for teachers. While the situation in the U.S. is far more diverse than that in England and Wales, the effects of high-stakes state-mandated testing are very sim-

ilar to those of the external tests in the United Kingdom. Moreover, the traditional reliance on multiple-choice testing in the U.S. — not shared in the United Kingdom — has exacerbated the negative effects of such policies on the quality of classroom learning.

How Can We Improve Formative Assessment?

The self-esteem of pupils. A report of schools in Switzerland states that "a number of pupils . . . are content to 'get by.' . . . Every teacher who wants to practice formative assessment must reconstruct the teaching contracts so as to counteract the habits acquired by his pupils."¹⁴

The ultimate user of assessment information that is elicited in order to improve learning is the pupil. There are negative and positive aspects of this fact. The negative aspect is illustrated by the preceding quotation. When the classroom culture focuses on rewards, "gold stars," grades, or class ranking, then pupils look for ways to obtain the best marks rather than to improve their learning. One reported consequence is that, when they have any choice, pupils avoid difficult tasks. They also spend time and energy looking for clues to the "right answer." Indeed, many become reluctant to ask questions out of a fear of failure. Pupils who encounter difficulties are led to believe that they lack ability, and this belief leads them to attribute their difficulties to a defect in themselves about which they cannot do a great deal. Thus they avoid investing effort in learning that can lead only to disappointment, and they try to build up their self-esteem in other ways.

The positive aspect of students' being the primary users of the information gleaned from formative assessments is that negative outcomes — such as an obsessive focus on competition and the attendant fear of failure on the part of low achievers — are not inevitable. What is needed is a culture of success, backed by a belief that all pupils can achieve. In this regard, formative assessment can be a powerful weapon if it is communicated in the right way. While formative assessment can help all

pupils, it yields particularly good results with low achievers by concentrating on specific problems with their work and giving them a clear understanding of what is wrong and how to put it right. Pupils can accept and work with such messages, provided that they are not clouded by overtones about ability, competition, and comparison with others. In summary, the message can be stated as follows: *feedback to any pupil should be about the particular qualities of his or her work, with advice on what he or she can do to improve, and should avoid comparisons with other pupils.*

Self-assessment by pupils. Many successful innovations have developed self- and peer-assessment by pupils as ways of enhancing formative assessment, and such work has achieved some success with pupils from age 5 upward. This link of formative assessment to self-assessment is not an accident; indeed, it is inevitable.

To explain this last statement, we should first note that the main problem that those who are developing self-assessments encounter is not a problem of reliability and trustworthiness. Pupils are generally honest and reliable in assessing both themselves and one another; they can even be too hard on themselves. The main problem is that pupils can assess themselves only when they have a sufficiently clear picture of the targets that their learning is meant to attain. Surprisingly, and sadly, many pupils do not have such a picture, and they appear to have become accustomed to receiving classroom teaching as an arbitrary sequence of exercises with no overarching rationale. To overcome this pattern of passive reception requires hard and sustained work. When pupils do acquire such an overview, they then become more committed and more effective as learners. Moreover, their own assessments become an object of discussion with their teachers and with one another, and this discussion further promotes the reflection on one's own thinking that is essential to good learning.

Thus self-assessment by pupils, far from being a luxury, is in fact an *essential component of formative assessment*. When anyone is trying to learn, feedback about the effort has three elements: recognition of the *desired goal*, evidence about *present position*, and some understanding of a *way to close the gap* between the two.¹⁵ All three must be understood to some degree by anyone before he or she can take action

to improve learning.

Such an argument is consistent with more general ideas established by research into the way people learn. New understandings are not simply swallowed and stored in isolation; they have to be assimilated in relation to preexisting ideas. The new and the old may be inconsistent or even in conflict, and the disparities must be resolved by thoughtful actions on the part of the learner. Realizing that there are new goals for the learning is an essential part of this process of assimilation. Thus we

Dialogue with the teacher provides the opportunity for the teacher to respond to and reorient a pupil's thinking.

conclude: if formative assessment is to be productive, pupils should be trained in self-assessment so that they can understand the main purposes of their learning and thereby grasp what they need to do to achieve.

The evolution of effective teaching.

The research studies referred to above show very clearly that effective programs of formative assessment involve far more than the addition of a few observations and tests to an existing program. They require careful scrutiny of all the main components of a teaching plan. Indeed, it is clear that instruction and formative assessment are indivisible.

To begin at the beginning, the choice of tasks for classroom work and homework is important. Tasks have to be justified in terms of the learning aims that they serve, and they can work well only if opportunities for pupils to communicate their evolving understanding are built into the planning. Discussion, observation of activities, and marking of written work can all be used to provide those opportunities, but it is then important to look at or listen carefully to the talk, the writing, and the actions through which pupils develop and

display the state of their understanding. Thus we maintain that *opportunities for pupils to express their understanding should be designed into any piece of teaching, for this will initiate the interaction through which formative assessment aids learning.*

Discussions in which pupils are led to talk about their understanding in their own ways are important aids to increasing knowledge and improving understanding. Dialogue with the teacher provides the opportunity for the teacher to respond to and reorient a pupil's thinking. However, there are clearly recorded examples of such discussions in which teachers have, quite unconsciously, responded in ways that would inhibit the future learning of a pupil. What the examples have in common is that the teacher is looking for a particular response and lacks the flexibility or the confidence to deal with the unexpected. So the teacher tries to direct the pupil toward giving the expected answer. In manipulating the dialogue in this way, the teacher seals off any unusual, often thoughtful but unorthodox, attempts by pupils to work out their own answers. Over time the pupils get the message: they are not required to think out their own answers. The object of the exercise is to work out — or guess — what answer the teacher expects to see or hear.

A particular feature of the talk between teacher and pupils is the asking of questions by the teacher. This natural and direct way of checking on learning is often unproductive. One common problem is that, following a question, teachers do not wait long enough to allow pupils to think out their answers. When a teacher answers his or her own question after only two or three seconds and when a minute of silence is not tolerable, there is no possibility that a pupil can think out what to say.

There are then two consequences. One is that, because the only questions that can produce answers in such a short time are questions of fact, these predominate. The other is that pupils don't even try to think out a response. Because they know that the answer, followed by another question, will come along in a few seconds, there is no point in trying. It is also generally the case that only a few pupils in a class answer the teacher's questions. The rest then leave it to these few, knowing that they cannot respond as quickly and being unwilling to risk making mistakes in public. So the teacher, by lowering the level

Tests given in class and tests and other exercises assigned for homework are also important means of promoting feedback.

of questions and by accepting answers from a few, can keep the lesson going but is actually out of touch with the understanding of most of the class. The question/answer dialogue becomes a ritual, one in which thoughtful involvement suffers.

There are several ways to break this particular cycle. They involve giving pupils time to respond; asking them to discuss their thinking in pairs or in small groups, so that a respondent is speaking on behalf of others; giving pupils a choice between different possible answers and asking them to vote on the options; asking all of them to write down an answer and then reading out a selected few; and so on. What is essential is that any dialogue should evoke thoughtful reflection in which all pupils can be encouraged to take part, for only then can the formative process start to work. In short, the dialogue between pupils and a teacher should be *thoughtful, reflective, focused to evoke and explore understanding, and conducted so that all pupils have an opportunity to think and to express their ideas.*

Tests given in class and tests and other exercises assigned for homework are also important means of promoting feedback. A good test can be an occasion for learning. It is better to have frequent short tests than infrequent long ones. Any new learning should first be tested within about a week of a first encounter, but more frequent tests are counterproductive. The quality of the test items — that is, their relevance to the main learning aims and their clear communication to the pupil — requires scrutiny as well. Good questions are hard to generate, and teachers should collaborate and draw on outside sources to collect such questions.

Given questions of good quality, it is essential to ensure the quality of the feedback. Research studies have shown that, if pupils are given only marks or grades, they do not benefit from the feedback. The worst scenario is one in which some pupils who get low marks this time also got low marks last time and come to expect to get low marks next time. This cycle of repeated failure becomes part of a shared belief between such students and their

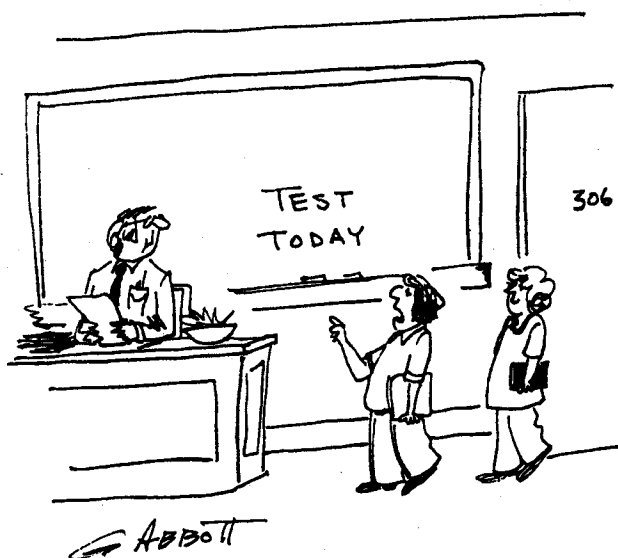
teacher. Feedback has been shown to improve learning when it gives each pupil specific guidance on strengths and weaknesses, preferably without any overall marks. Thus the way in which test results are reported to pupils so that they can identify their own strengths and weaknesses is critical. Pupils must be given the means and opportunities to work with evidence of their difficulties. For formative purposes, a test at the end of a unit or teaching module is pointless; it is too late to work with the results. We conclude that *the feedback on tests, seatwork, and homework should give each pupil guidance on how to improve, and each pupil must be given help and an opportunity to work on the improvement.*

All these points make clear that there is no one simple way to improve formative assessment. What is common to them is that a teacher's approach should start by being realistic and confronting the question "Do I really know enough about the understanding of my pupils to be able to help each of them?"

Much of the work teachers must do to make good use of formative assessment can give rise to difficulties. Some pupils will resist attempts to change accustomed

routines, for any such change is uncomfortable, and emphasis on the challenge to think for yourself (and not just to work harder) can be threatening to many. Pupils cannot be expected to believe in the value of changes for their learning before they have experienced the benefits of such changes. Moreover, many of the initiatives that are needed take more class time, particularly when a central purpose is to change the outlook on learning and the working methods of pupils. Thus teachers have to take risks in the belief that such investment of time will yield rewards in the future, while "delivery" and "coverage" with poor understanding are pointless and can even be harmful.

Teachers must deal with two basic issues that are the source of many of the problems associated with changing to a system of formative assessment. The first is *the nature of each teacher's beliefs about learning.* If the teacher assumes that knowledge is to be transmitted and learned, that understanding will develop later, and that clarity of exposition accompanied by rewards for patient reception are the essentials of good teaching, then formative assessment is hardly necessary. However, most teachers accept the wealth of evi-



"It has been said that a fool can ask more questions than a wise man can answer."

Inside the Black Box

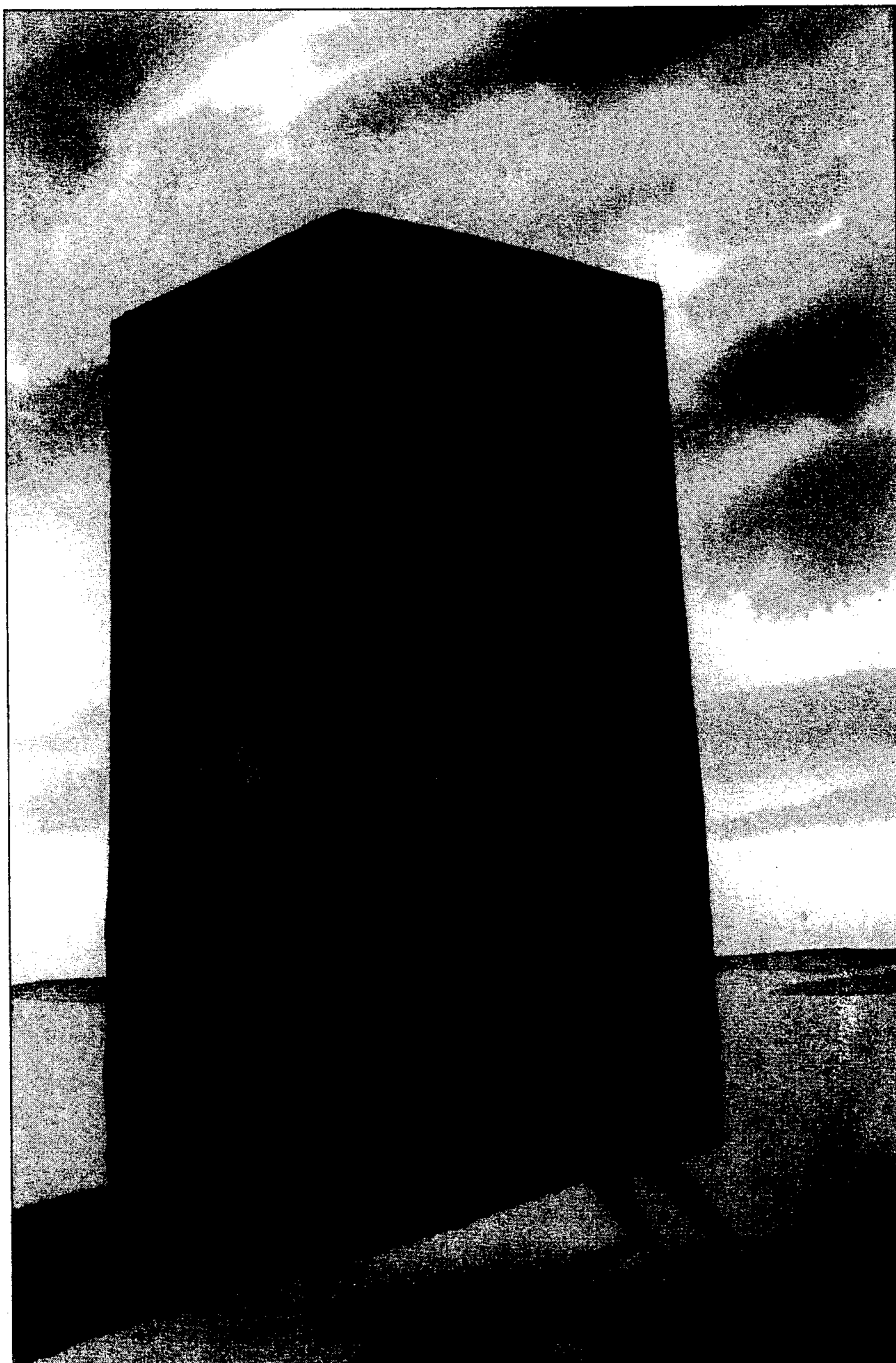
Raising Standards Through Classroom Assessment

BY PAUL BLACK AND
DYLAN WILIAM

Firm evidence shows that formative assessment is an essential component of classroom work and that its development can raise standards of achievement, Mr. Black and Mr. Wiliam point out. Indeed, they know of no other way of raising standards for which such a strong prima facie case can be made.

R AISING the standards of learning that are achieved through schooling is an important national priority. In recent years, governments throughout the world have been more and more vigorous in making changes in pursuit of this aim. National, state, and district standards; target setting; enhanced programs for the external testing of students' performance; surveys such as NAEP (National Assessment of Educational Progress) and TIMSS (Third International Mathematics and Science Study); initiatives to improve school plan-

PAUL BLACK is professor emeritus in the School of Education, King's College, London, where DYLAN WILLIAM is head of school and professor of educational assessment.



ning and management; and more frequent and thorough inspection are all means toward the same end. But the sum of all these reforms has not added up to an effective policy because something is missing.

Learning is driven by what teachers and pupils do in classrooms. Teachers have to manage complicated and demanding situations, channeling the personal, emotional, and social pressures of a group of 30 or more youngsters in order to help them learn immediately and become better learners in the future. Standards can be raised only if teachers can tackle this task more effectively. What is missing from the efforts alluded to above is any direct help with this task. This fact was recognized in the TIMSS video study: "A focus on standards and accountability that ignores the processes of teaching and learning in classrooms will not provide the direction that teachers need in their quest to improve."¹

In terms of systems engineering, present policies in the U.S. and in many other countries seem to treat the classroom as a black box. Certain *inputs* from the outside — pupils, teachers, other resources, management rules and requirements, parental anxieties, standards, tests with high stakes, and so on — are fed into the box. Some *outputs* are supposed to follow: pupils who are more knowledgeable and competent, better test results, teachers who are reasonably satisfied, and so on. But what is happening inside the box? How can anyone be sure that a particular set of new inputs will produce better outputs if we don't at least study what happens inside? And why is it that most of the reform initiatives mentioned in the first paragraph are not aimed at giving direct help and support to the work of teachers in classrooms?

The answer usually given is that it is up to teachers: they have to make the inside work better. This answer is not good enough, for two reasons. First, it is at least possible that some changes in the inputs may be counterproductive and make it harder for teachers to raise standards. Second, it seems strange, even unfair, to leave the most difficult piece of the standards-raising puzzle entirely to teachers. If there are ways in which policy makers and others can give direct help and support to the everyday classroom task of achieving better learning, then surely these ways ought to be pursued vigorously.

This article is about the inside of the black box. We focus on one aspect of teach-

ing: formative assessment. But we will show that this feature is at the heart of effective teaching.

The Argument

We start from the self-evident proposition that teaching and learning must be interactive. Teachers need to know about their pupils' progress and difficulties with learning so that they can adapt their own work to meet pupils' needs — needs that are often unpredictable and that vary from one pupil to another. Teachers can find out what they need to know in a variety of ways, including observation and discussion in the classroom and the reading of pupils' written work.

We use the general term *assessment* to refer to all those activities undertaken by teachers — and by their students in assessing themselves — that provide information to be used as feedback to modify teaching and learning activities. Such assessment becomes *formative assessment* when the evidence is actually used to adapt the teaching to meet student needs.²

There is nothing new about any of this. All teachers make assessments in every class they teach. But there are three important questions about this process that we seek to answer:

- Is there evidence that improving formative assessment raises standards?
- Is there evidence that there is room for improvement?
- Is there evidence about how to improve formative assessment?

In setting out to answer these questions, we have conducted an extensive survey of the research literature. We have checked through many books and through the past nine years' worth of issues of more than 160 journals, and we have studied earlier reviews of research. This process yielded about 580 articles or chapters to study. We prepared a lengthy review, using material from 250 of these sources, that has been published in a special issue of the journal *Assessment in Education*, together with comments on our work by leading educational experts from Australia, Switzerland, Hong Kong, Lesotho, and the U.S.³

The conclusion we have reached from our research review is that the answer to each of the three questions above is clearly yes. In the three main sections below, we outline the nature and force of the evidence that justifies this conclusion. However, because we are presenting a sum-

mary here, our text will appear strong on assertions and weak on the details of their justification. We maintain that these assertions are backed by evidence and that this backing is set out in full detail in the lengthy review on which this article is founded.

We believe that the three sections below establish a strong case that *governments, their agencies, school authorities, and the teaching profession should study very carefully whether they are seriously interested in raising standards in education*. However, we also acknowledge widespread evidence that fundamental change in education can be achieved only slowly — through programs of professional development that build on existing good practice. Thus we do not conclude that formative assessment is yet another "magic bullet" for education. The issues involved are too complex and too closely linked to both the difficulties of classroom practice and the beliefs that drive public policy. In a final section, we confront this complexity and try to sketch out a strategy for acting on our evidence.

Does Improving Formative Assessment Raise Standards?

A research review published in 1986, concentrating primarily on classroom assessment work for children with mild handicaps, surveyed a large number of innovations, from which 23 were selected.⁴ Those chosen satisfied the condition that quantitative evidence of learning gains was obtained, both for those involved in the innovation and for a similar group not so involved. Since then, many more papers have been published describing similarly careful quantitative experiments. Our own review has selected at least 20 more studies. (The number depends on how rigorous a set of selection criteria are applied.) All these studies show that innovations that include strengthening the practice of formative assessment produce significant and often substantial learning gains. These studies range over age groups from 5-year-olds to university undergraduates, across several school subjects, and over several countries.

For research purposes, learning gains of this type are measured by comparing the average improvements in the test scores of pupils involved in an innovation with the range of scores that are found for typical groups of pupils on these same tests.

The ratio of the former divided by the latter is known as the *effect size*. Typical effect sizes of the formative assessment experiments were between 0.4 and 0.7. These effect sizes are larger than most of those found for educational interventions. The following examples illustrate some practical consequences of such large gains.

- An effect size of 0.4 would mean that the average pupil involved in an innovation would record the same achievement as a pupil in the top 35% of those not so involved.

- An effect size gain of 0.7 in the recent international comparative studies in mathematics⁵ would have raised the score of a nation in the middle of the pack of 41 countries (e.g., the U.S.) to one of the top five.

Many of these studies arrive at another important conclusion: that improved formative assessment helps low achievers more than other students and so reduces the range of achievement while raising achievement overall. A notable recent example is a study devoted entirely to low-achieving students and students with learning disabilities, which shows that frequent assessment feedback helps both groups enhance their learning.⁶ Any gains for such pupils could be partic-

ularly important. Furthermore, pupils who come to see themselves as unable to learn usually cease to take school seriously. Many become disruptive; others resort to truancy. Such young people are likely to be alienated from society and to become the sources and the victims of serious social problems.

Thus it seems clear that very significant learning gains lie within our grasp. The fact that such gains have been achieved by a variety of methods that have, as a common feature, enhanced formative assessment suggests that this feature accounts, at least in part, for the successes. However, it does not follow that it would be an easy matter to achieve such gains on a wide scale in normal classrooms. Many of the reports we have studied raise a number of other issues.

- All such work involves new ways to enhance feedback between those taught and the teacher, ways that will require significant changes in classroom practice.

- Underlying the various approaches are assumptions about what makes for effective learning — in particular the assumption that students have to be actively involved.

- For assessment to function formative-

ly, the results have to be used to adjust teaching and learning; thus a significant aspect of any program will be the ways in which teachers make these adjustments.

- The ways in which assessment can affect the motivation and self-esteem of pupils and the benefits of engaging pupils in self-assessment deserve careful attention.

Is There Room for Improvement?

A poverty of practice. There is a wealth of research evidence that the everyday practice of assessment in classrooms is beset with problems and shortcomings, as the following selected quotations indicate.

- "Marking is usually conscientious but often fails to offer guidance on how work can be improved. In a significant minority of cases, marking reinforces underachievement and underexpectation by being too generous or unfocused. Information about pupil performance received by the teacher is insufficiently used to inform subsequent work," according to a United Kingdom inspection report on secondary schools.⁷

- "Why is the extent and nature of formative assessment in science so impoverished?" asked a research study on secondary science teachers in the United Kingdom.⁸

- "Indeed they pay lip service to [formative assessment] but consider that its practice is unrealistic in the present educational context," reported a study of Canadian secondary teachers.⁹

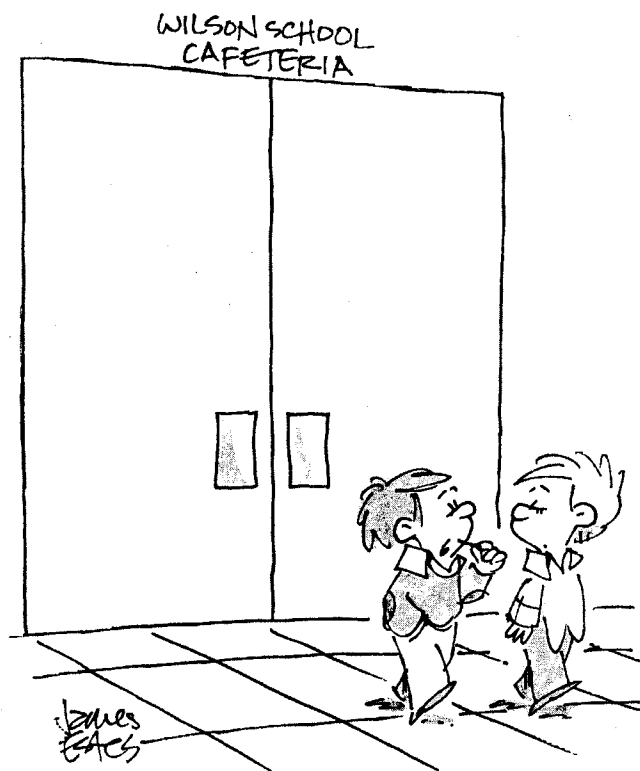
- "The assessment practices outlined above are not common, even though these kinds of approaches are now widely promoted in the professional literature," according to a review of assessment practices in U.S. schools.¹⁰

The most important difficulties with assessment revolve around three issues. The first issue is *effective learning*.

- The tests used by teachers encourage rote and superficial learning even when teachers say they want to develop understanding; many teachers seem unaware of the inconsistency.

- The questions and other methods teachers use are not shared with other teachers in the same school, and they are not critically reviewed in relation to what they actually assess.

- For primary teachers particularly, there is a tendency to emphasize quantity and presentation of work and to neglect its



"The food's really not half bad, but the atmosphere leaves a lot to be desired."

The ultimate user of assessment information that is elicited in order to improve learning is the pupil.

quality in relation to learning.

The second issue is *negative impact*.

- The giving of marks and the grading function are overemphasized, while the giving of useful advice and the learning function are underemphasized.

- Approaches are used in which pupils are compared with one another, the prime purpose of which seems to them to be competition rather than personal improvement; in consequence, assessment feedback teaches low-achieving pupils that they lack "ability," causing them to come to believe that they are not able to learn.

The third issue is the *managerial role* of assessments.

- Teachers' feedback to pupils seems to serve social and managerial functions, often at the expense of the learning function.

- Teachers are often able to predict pupils' results on external tests because their own tests imitate them, but at the same time teachers know too little about their pupils' learning needs.

- The collection of marks to fill in records is given higher priority than the analysis of pupils' work to discern learning needs; furthermore, some teachers pay no attention to the assessment records of their pupils' previous teachers.

Of course, not all these descriptions apply to all classrooms. Indeed, there are many schools and classrooms to which they do not apply at all. Nevertheless, these general conclusions have been drawn by researchers who have collected evidence — through observation, interviews, and questionnaires — from schools in several countries, including the U.S.

An empty commitment. The development of national assessment policy in England and Wales over the last decade illustrates the obstacles that stand in the way of developing policy support for formative assessment. The recommendations of a government task force in 1988¹¹ and all subsequent statements of government policy have emphasized the importance of formative assessment by teachers. However, the body charged with carrying out government policy on assessment had no strategy either to study or to develop the formative assessment of teachers and did

no more than devote a tiny fraction of its resources to such work.¹² Most of the available resources and most of the public and political attention were focused on national external tests. While teachers' contributions to these "summative assessments" have been given some formal status, hardly any attention has been paid to their contributions through formative assessment. Moreover, the problems of the relationship between teachers' formative and summative roles have received no attention.

It is possible that many of the commitments were stated in the belief that formative assessment was not problematic, that it already happened all the time and needed no more than formal acknowledgment of its existence. However, it is also clear that the political commitment to external testing in order to promote competition had a central priority, while the commitment to formative assessment was marginal. As researchers the world over have found, high-stakes external tests always dominate teaching and assessment. However, they give teachers poor models for formative assessment because of their limited function of providing overall summaries of achievement rather than helpful diagnosis. Given this fact, it is hardly surprising that numerous research studies of the implementation of the education reforms in the United Kingdom have found that formative assessment is "seriously in need of development."¹³ With hindsight, we can see that the failure to perceive the need for substantial support for formative assessment and to take responsibility for developing such support was a serious error.

In the U.S. similar pressures have been felt from political movements characterized by a distrust of teachers and a belief that external testing will, on its own, improve learning. Such fractured relationships between policy makers and the teaching profession are not inevitable — indeed, many countries with enviable educational achievements seem to manage well with policies that show greater respect and support for teachers. While the situation in the U.S. is far more diverse than that in England and Wales, the effects of high-stakes state-mandated testing are very sim-

ilar to those of the external tests in the United Kingdom. Moreover, the traditional reliance on multiple-choice testing in the U.S. — not shared in the United Kingdom — has exacerbated the negative effects of such policies on the quality of classroom learning.

How Can We Improve Formative Assessment?

The self-esteem of pupils. A report of schools in Switzerland states that "a number of pupils . . . are content to 'get by.' . . . Every teacher who wants to practice formative assessment must reconstruct the teaching contracts so as to counteract the habits acquired by his pupils."¹⁴

The ultimate user of assessment information that is elicited in order to improve learning is the pupil. There are negative and positive aspects of this fact. The negative aspect is illustrated by the preceding quotation. When the classroom culture focuses on rewards, "gold stars," grades, or class ranking, then pupils look for ways to obtain the best marks rather than to improve their learning. One reported consequence is that, when they have any choice, pupils avoid difficult tasks. They also spend time and energy looking for clues to the "right answer." Indeed, many become reluctant to ask questions out of a fear of failure. Pupils who encounter difficulties are led to believe that they lack ability, and this belief leads them to attribute their difficulties to a defect in themselves about which they cannot do a great deal. Thus they avoid investing effort in learning that can lead only to disappointment, and they try to build up their self-esteem in other ways.

The positive aspect of students' being the primary users of the information gleaned from formative assessments is that negative outcomes — such as an obsessive focus on competition and the attendant fear of failure on the part of low achievers — are not inevitable. What is needed is a culture of success, backed by a belief that all pupils can achieve. In this regard, formative assessment can be a powerful weapon if it is communicated in the right way. While formative assessment can help all

pupils, it yields particularly good results with low achievers by concentrating on specific problems with their work and giving them a clear understanding of what is wrong and how to put it right. Pupils can accept and work with such messages, provided that they are not clouded by overtones about ability, competition, and comparison with others. In summary, the message can be stated as follows: *feedback to any pupil should be about the particular qualities of his or her work, with advice on what he or she can do to improve, and should avoid comparisons with other pupils.*

Self-assessment by pupils. Many successful innovations have developed self- and peer-assessment by pupils as ways of enhancing formative assessment, and such work has achieved some success with pupils from age 5 upward. This link of formative assessment to self-assessment is not an accident; indeed, it is inevitable.

To explain this last statement, we should first note that the main problem that those who are developing self-assessments encounter is not a problem of reliability and trustworthiness. Pupils are generally honest and reliable in assessing both themselves and one another; they can even be too hard on themselves. The main problem is that pupils can assess themselves only when they have a sufficiently clear picture of the targets that their learning is meant to attain. Surprisingly, and sadly, many pupils do not have such a picture, and they appear to have become accustomed to receiving classroom teaching as an arbitrary sequence of exercises with no overarching rationale. To overcome this pattern of passive reception requires hard and sustained work. When pupils do acquire such an overview, they then become more committed and more effective as learners. Moreover, their own assessments become an object of discussion with their teachers and with one another, and this discussion further promotes the reflection on one's own thinking that is essential to good learning.

Thus self-assessment by pupils, far from being a luxury, is in fact *an essential component of formative assessment*. When anyone is trying to learn, feedback about the effort has three elements: recognition of the *desired goal*, evidence about *present position*, and some understanding of a *way to close the gap* between the two.¹⁵ All three must be understood to some degree by anyone before he or she can take action

to improve learning.

Such an argument is consistent with more general ideas established by research into the way people learn. New understandings are not simply swallowed and stored in isolation; they have to be assimilated in relation to preexisting ideas. The new and the old may be inconsistent or even in conflict, and the disparities must be resolved by thoughtful actions on the part of the learner. Realizing that there are new goals for the learning is an essential part of this process of assimilation. Thus we

Dialogue with the teacher provides the opportunity for the teacher to respond to and reorient a pupil's thinking.

conclude: *if formative assessment is to be productive, pupils should be trained in self-assessment so that they can understand the main purposes of their learning and thereby grasp what they need to do to achieve.*

The evolution of effective teaching.

The research studies referred to above show very clearly that effective programs of formative assessment involve far more than the addition of a few observations and tests to an existing program. They require careful scrutiny of all the main components of a teaching plan. Indeed, it is clear that instruction and formative assessment are indivisible.

To begin at the beginning, the choice of tasks for classroom work and homework is important. Tasks have to be justified in terms of the learning aims that they serve, and they can work well only if opportunities for pupils to communicate their evolving understanding are built into the planning. Discussion, observation of activities, and marking of written work can all be used to provide those opportunities, but it is then important to look at or listen carefully to the talk, the writing, and the actions through which pupils develop and

display the state of their understanding. Thus we maintain that *opportunities for pupils to express their understanding should be designed into any piece of teaching, for this will initiate the interaction through which formative assessment aids learning.*

Discussions in which pupils are led to talk about their understanding in their own ways are important aids to increasing knowledge and improving understanding. Dialogue with the teacher provides the opportunity for the teacher to respond to and reorient a pupil's thinking. However, there are clearly recorded examples of such discussions in which teachers have, quite unconsciously, responded in ways that would inhibit the future learning of a pupil. What the examples have in common is that the teacher is looking for a particular response and lacks the flexibility or the confidence to deal with the unexpected. So the teacher tries to direct the pupil toward giving the expected answer. In manipulating the dialogue in this way, the teacher seals off any unusual, often thoughtful but unorthodox, attempts by pupils to work out their own answers. Over time the pupils get the message: they are not required to think out their own answers. The object of the exercise is to work out — or guess — what answer the teacher expects to see or hear.

A particular feature of the talk between teacher and pupils is the asking of questions by the teacher. This natural and direct way of checking on learning is often unproductive. One common problem is that, following a question, teachers do not wait long enough to allow pupils to think out their answers. When a teacher answers his or her own question after only two or three seconds and when a minute of silence is not tolerable, there is no possibility that a pupil can think out what to say.

There are then two consequences. One is that, because the only questions that can produce answers in such a short time are questions of fact, these predominate. The other is that pupils don't even try to think out a response. Because they know that the answer, followed by another question, will come along in a few seconds, there is no point in trying. It is also generally the case that only a few pupils in a class answer the teacher's questions. The rest then leave it to these few, knowing that they cannot respond as quickly and being unwilling to risk making mistakes in public. So the teacher, by lowering the level

Tests given in class and tests and other exercises assigned for homework are also important means of promoting feedback.

of questions and by accepting answers from a few, can keep the lesson going but is actually out of touch with the understanding of most of the class. The question/answer dialogue becomes a ritual, one in which thoughtful involvement suffers.

There are several ways to break this particular cycle. They involve giving pupils time to respond; asking them to discuss their thinking in pairs or in small groups, so that a respondent is speaking on behalf of others; giving pupils a choice between different possible answers and asking them to vote on the options; asking all of them to write down an answer and then reading out a selected few; and so on. What is essential is that any dialogue should evoke thoughtful reflection in which all pupils can be encouraged to take part, for only then can the formative process start to work. In short, the dialogue between pupils and a teacher should be *thoughtful, reflective, focused to evoke and explore understanding, and conducted so that all pupils have an opportunity to think and to express their ideas.*

Tests given in class and tests and other exercises assigned for homework are also important means of promoting feedback. A good test can be an occasion for learning. It is better to have frequent short tests than infrequent long ones. Any new learning should first be tested within about a week of a first encounter, but more frequent tests are counterproductive. The quality of the test items — that is, their relevance to the main learning aims and their clear communication to the pupil — requires scrutiny as well. Good questions are hard to generate, and teachers should collaborate and draw on outside sources to collect such questions.

Given questions of good quality, it is essential to ensure the quality of the feedback. Research studies have shown that, if pupils are given only marks or grades, they do not benefit from the feedback. The worst scenario is one in which some pupils who get low marks this time also got low marks last time and come to expect to get low marks next time. This cycle of repeated failure becomes part of a shared belief between such students and their

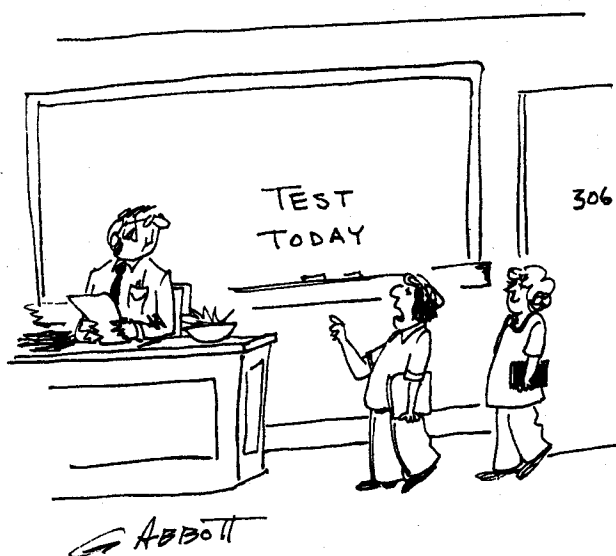
teacher. Feedback has been shown to improve learning when it gives each pupil specific guidance on strengths and weaknesses, preferably without any overall marks. Thus the way in which test results are reported to pupils so that they can identify their own strengths and weaknesses is critical. Pupils must be given the means and opportunities to work with evidence of their difficulties. For formative purposes, a test at the end of a unit or teaching module is pointless; it is too late to work with the results. We conclude that *the feedback on tests, seatwork, and homework should give each pupil guidance on how to improve, and each pupil must be given help and an opportunity to work on the improvement.*

All these points make clear that there is no one simple way to improve formative assessment. What is common to them is that a teacher's approach should start by being realistic and confronting the question "Do I really know enough about the understanding of my pupils to be able to help each of them?"

Much of the work teachers must do to make good use of formative assessment can give rise to difficulties. Some pupils will resist attempts to change accustomed

routines, for any such change is uncomfortable, and emphasis on the challenge to think for yourself (and not just to work harder) can be threatening to many. Pupils cannot be expected to believe in the value of changes for their learning before they have experienced the benefits of such changes. Moreover, many of the initiatives that are needed take more class time, particularly when a central purpose is to change the outlook on learning and the working methods of pupils. Thus teachers have to take risks in the belief that such investment of time will yield rewards in the future, while "delivery" and "coverage" with poor understanding are pointless and can even be harmful.

Teachers must deal with two basic issues that are the source of many of the problems associated with changing to a system of formative assessment. The first is *the nature of each teacher's beliefs about learning.* If the teacher assumes that knowledge is to be transmitted and learned, that understanding will develop later, and that clarity of exposition accompanied by rewards for patient reception are the essentials of good teaching, then formative assessment is hardly necessary. However, most teachers accept the wealth of evi-



"It has been said that a fool can ask more questions than a wise man can answer."

OPI Statewide Assessment Conference



OPI Assessment and Test Administration Conference

➡ indicates sessions focused
on formative assessment

Wednesday, January 28, 2009

4:00 p.m. - 6:00 p.m. Late Registration and Pick Up Conference Packets

Thursday, January 29, 2009

7:00 a.m. - 8:30 a.m. Late registration and Pick Up Conference Packets

7:30 a.m. - 8:30 a.m. Breakfast - Sponsored by Questar Assessment, Inc and OPI
Ballroom

8:30 a.m. - 8:45 a.m. Opening Remarks - Conference Kickoff
Ballroom
Judy Snow, Assessment Director
Denise Juneau, Superintendent of Public Instruction

➡ 8:45 a.m. - 9:45 a.m. Classroom Practice of Formative Assessment
Ballroom
Dr. Margaret Heritage, Assistant Director for Professional Development at the
National Center for Research on Evaluation, Standards and Student Testing
(CRESST) at UCLA

➡ 9:45 a.m. - 10:00 a.m. Break - Sponsored by Measured Progress and OPI

➡ 10:00 a.m. - 11:10 a.m. Keynote follow-up
Ballroom A

10:00 a.m. - 11:10 a.m. MT Standards Based Education
Conference Room 1
Colet Bartow, OPI
Participants will be introduced to the Montana Standards-based framework with
opportunities to better understand content standards and how they are implemented in
Montana.

10:00 a.m. - 11:10 a.m. Using the "Clickers" to Help Increase Test Scores With The CRT
Conference Room 5
Dena Kirschten, Technology Teacher
This session will inform teachers of ways to make assessment a more enjoyable
experience for both teachers and students. We will be exploring how to incorporate
MARS statistics to determine needs of individual students and infuse them into the
daily curriculum using Classroom Performance System (clickers) and ExamView.

10:00 a.m. - 11:10 a.m. AIM, AMO, AYP, and an Overview of the 2008 AYP Results
Skybridge 1
Denise Bond, OPI
This presentation will demonstrate to educators the importance of AIM (Achievement
in Montana), build on their understanding of AMO (Annual Measurable Objectives),
and examine 2008 AYP (Adequate Yearly Progress) Results.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

10:00 a.m. – 11:10 a.m.
Skybridge 3

**Using Data to Maximize Growth of all Students:
Transformative Assessment in Action**

Mona Sindelar, Testing Coordinator, Huntley Project Schools

Using data, each student will develop a plan to reach their target growth in both a weak and strong area in reading and math based on Montana Standards.

10:00 a.m. – 11:10 a.m.
Skybridge 4

New Ideas in Test Design for Students Who Persistently Fail

Sue Bechard, Measured Progress and Chris Comacho, Children's Progress

The Montana Office of Public Instruction is leading two ambitious research projects to better understand how to make the MontCAS CRT more accessible and appropriate for students with disabilities who struggle to achieve grade level expectations. The ART 2% project is currently administering a high school reading pilot test to explore changes to item content, test format, and read-aloud administration. The Montana GSEG is looking at the effects of providing scaffolding through format and content hints for middle school reading and mathematics assessments. Please join us for a discussion of the innovative strategies used to investigate new assessment approaches and the questions the projects are designed to answer.

11:20 a.m. - 12:30 p.m.
Ballroom A

CRT Test Materials*

Dan Verdick, Measured Progress

This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets.

11:20 a.m. - 12:30 p.m.
Conference Room 1

Small Writers – Enormous Possibilities

Kelly Boswell, Educational Consultant

Participants will learn how to incorporate one-on-one conferences into daily writing instruction, and to communicate to children about their writing, as well as examine a variety of ways to assess young writers.

11:20 a.m. - 12:30 p.m.
Conference Room 5

Lessons Learned/Learning

Sharon Carroll, Moderator

Sharon Carroll will moderate a panel of Montana educators discussing formative assessment strategies and experiences.

11:20 a.m. - 12:30 p.m.
Skybridge 1

CRT-Alt*

Gail McGregor, University of Montana & Lynn Albee, Measured Progress

This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials.

11:20 a.m. - 12:30 p.m.
Skybridge 3

5YCEP

Al McMillin, OPI

An overview of the new revised on-line 5YCEP process. This revised tool will allow schools and districts to more efficiently and effectively examine a wide array of available achievement, demographic, and enrollment data electronically and it will also provide a design vehicle for both the long and short term planning components required as part of the 5YCEP process rule.

11:20 a.m. - 12:30 p.m.
Skybridge 4

MARS*

Ian McIntosh, Measured Progress

This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

12:30 p.m. – 1:40 p.m.
Ballroom

Lunch – Sponsored by OPI
Entertainment: Billings Senior High School, Expressions

1:50 p.m. – 3:00 p.m.
Ballroom A

CRT Test Administration Training and Test Security*

Judy Snow, OPI

This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.

➔ 1:50 p.m. – 3:00 p.m.
Conference Room 1

Conference with Courage

Kelly Boswell, Educational Consultant

Participants will learn how to incorporate one-on-one conferences into daily writing instruction, and to communicate to children about their writing, as well as examine a variety of ways to assess young writers.

1:50 p.m. – 3:00 p.m.
Conference Room 5

Reporting Quality Data in AIM*

Sara Loewen, OPI

“Quality data” is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source.

➔ 1:50 p.m. – 3:00 p.m.
Skybridge 1

Formative Assessment Through the RTI Lens

Michele Paine, Kalispell Public Schools

The use of formative assessment is a cornerstone of effective instruction, but how does formative assessment fit into the RTI structure? This session looks at the significant role formative assessment plays in the RTI process. Much of what we know about RTI is at the structural level; however, with careful formative assessment practices our RTI interventions can be very powerful where they need to be -at the student level.

1:50 p.m. – 3:00 p.m.
Skybridge 3

Accommodations*

Karen Richem, OPI

This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.

1:50 p.m. – 3:00 p.m.
Skybridge 4

MARS in the Classroom

Ken Stuker, Consultant

This session will focus on the analysis and interpretation of CRT results and their potential influence on instruction, student achievement, and curriculum. Analysis techniques will include methods to identify specific areas in the standards and benchmarks which are strengths or challenges for district students along with methods for interpretation of CRT results to determine particular skills that students find difficult. In addition, other potential applications of CRT results and items will be explored.

3:00 p.m. - 3:15 p.m.

Break – Sponsored by Measured Progress and OPI

3:30 p.m. - 4:40 p.m.
Ballroom A

CRT Test Administration Training and Test Security*

Judy Snow, OPI

This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

3:30 p.m. - 4:40 p.m.
Conference Room 1

CRT Test Materials*

Dan Verdick, Measured Progress

This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets.

3:30 p.m. - 4:40 p.m.
Conference Room 5

Reporting Quality Data in AIM*

Sara Loewen, OPI

"Quality data" is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source.

3:30 p.m. - 4:40 p.m.
Skybridge 1

CRT-Alt*

Gail McGregor, University of Montana & Lynn Albee, Measured Progress

This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials.

3:30 p.m. - 4:40 p.m.
Skybridge 3

Accommodations*

Karen Richem, OPI

This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.

3:30 p.m. - 4:40 p.m.
Skybridge 4

MARS*

Ian McIntosh, Measured Progress

This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

OPI Statewide Assessment Conference



OPI Assessment and Test Administration Conference

Friday, January 30, 2009

- | | |
|--|--|
| 7:00 a.m. - 8:30 a.m. | Registration and Pick Up Conference Packets |
| 7:30 a.m. - 8:30 a.m.
Ballroom | Breakfast – Sponsored by OPI |
| 8:30 a.m. - 9:40 a.m.
Ballroom A | CRT Test Materials*
Dan Verdick, Measured Progress
This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets. |
| 8:30 a.m. - 9:40 a.m.
Conference Room 1 | MT Standards Based Education
Colet Bartow, OPI
Participants will be introduced to the Montana Standards-based framework with opportunities to better understand content standards and how they are implemented in Montana. |
| 8:30 a.m. - 9:40 a.m.
Conference Room 5 | Reporting Quality Data in AIM*
Sara Loewen, OPI
“Quality data” is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source. |
| 8:30 a.m. - 9:40 a.m.
Skybridge 1 | CRT-AIt*
Gail McGregor, University of Montana & Lynn Albee, Measured Progress
This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials. |
| 8:30 a.m. - 9:40 a.m.
Skybridge 2 | Using MARS to Create Student Level Data for Past, Present, and Future Teachers
Dan Zorn, Assistant Superintendent, Kalispell Public Schools
Participants will be shown how the Kalispell Schools are using the student-level data in MARS to create excel reports that are of use to past, present, and future teachers. |

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

8:30 a.m. - 9:40 a.m. Skybridge 3	<p>Formative Assessment Through the RTI Lens Michele Paine, Kalispell Public Schools</p> <p>The use of formative assessment is a cornerstone of effective instruction, but how does formative assessment fit into the RTI structure? This session looks at the significant role formative assessment plays in the RTI process. Much of what we know about RTI is at the structural level; however, with careful formative assessment practices our RTI interventions can be very powerful where they need to be -at the student level.</p>
8:30 a.m. - 9:40 a.m. Skybridge 4	<p>MARS in the Classroom Ken Stuker, Consultant</p> <p>This session will focus on the analysis and interpretation of CRT results and their potential influence on instruction, student achievement, and curriculum. Analysis techniques will include methods to identify specific areas in the standards and benchmarks which are strengths or challenges for district students along with methods for interpretation of CRT results to determine particular skills that students find difficult. In addition, other potential applications of CRT results and items will be explored.</p>
9:50 am - 11:00 a.m. Ballroom A	<p>CRT Test Administration Training and Test Security* Judy Snow, OPI</p> <p>This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.</p>
9:50 am - 11:00 a.m. Conference Room 1	<p>AIM, AMO, AYP, and an Overview of the 2008 AYP Results Denise Bond, OPI</p> <p>This presentation will demonstrate to educators the importance of AIM (Achievement in Montana), build on their understanding of AMO (Annual Measurable Objectives), and examine 2008 AYP (Adequate Yearly Progress) Results.</p>
9:50 am - 11:00 a.m. Conference Room 5	<p>5YCEP Al McMillin, OPI</p> <p>An overview of the new revised on-line 5YCEP process. This revised tool will allow schools and districts to more efficiently and effectively examine a wide array of available achievement, demographic, and enrollment data electronically and it will also provide a design vehicle for both the long and short term planning components required as part of the 5YCEP process rule.</p>
9:50 am - 11:00 a.m. Skybridge 1	<p>Strategies for Students with Disabilities to Access the General Curriculum Gail McGregor, University of Montana</p> <p>This session will address the "disconnect" that sometimes occurs between the skills measured on the statewide assessment and the focus of daily instruction for students with disabilities. An overview of classroom strategies that are intended to enable students with disabilities to access the general education curriculum will be provided. The concept and strategies associated with standards-based IEPs will also be addressed.</p>
9:50 am - 11:00 a.m. Skybridge 2	<p>Progress Monitoring Using Interactive Tools Tom Korst, Katrina Stout, Shannon Stephens, and Noel Nesmith Seeley-Swan High School</p> <p>This presentation will illustrate how Seeley-Swan High School is successfully differentiating reading/writing instruction and monitoring the progress of individual students without significantly increasing the work-load of the teacher. This is possible through the utilization of a web-based reading and writing program that the high school staff has incorporated into the classroom as a common thread. The presenters will discuss (1) The research supporting our reading/writing program development (2) How we chose the reading/writing program (3) How the reading/writing program is embedded across the curriculum (4) How we are monitoring student progress (5) How our pyramid of reading/writing interventions is incorporated.</p>

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

- 9:50 a.m. - 11:00 a.m.
Skybridge 3
- Accommodations***
Karen Richem, OPI
This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.
- 9:50 a.m. - 11:00 a.m.
Skybridge 4
- MARS***
Ian McIntosh, Measured Progress
This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.
- 11:00 a.m. - 11:15 a.m.
- Break – Sponsored by Measured Progress and OPI**
- 11:20 a.m. - 12:30 p.m.
Ballroom A
- CRT Test Administration Training and Test Security***
Judy Snow, OPI
This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.
- 11:20 a.m. - 12:30 p.m.
Conference Room 1
- CRT Test Materials***
Dan Verdick, Measured Progress
This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets.
- 11:20 a.m. - 12:30 p.m.
Conference Room 5
- Reporting Quality Data in AIM***
Sara Loewen, OPI
“Quality data” is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source.
- 11:20 a.m. - 12:30 p.m.
Skybridge 1
- CRT-Alt***
Gail McGregor, University of Montana & Lynn Albee, Measured Progress
This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials.
- 11:20 a.m. - 12:30 p.m.
Skybridge 3
- Accommodations***
Karen Richem, OPI
This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.
- 11:20 a.m. - 12:30 p.m.
Skybridge 4
- MARS***
Ian McIntosh, Measured Progress
This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.
- 12:30 p.m. - 1:30 p.m.
Ballroom
- Lunch –Sponsored by OPI**
- 1:30 p.m.
- Conference Adjourned**

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting



U.S. Senate Committee on Appropriations

PRESS RELEASE

For Immediate Release: January 23, 2009
Contact: Rob Blumenthal w/Inouye 202-224-1010
John Bray w/Inouye 202-224-3751

Senate Appropriations Committee Releases Highlights of American Recovery and Reinvestment Plan *Committee Announces \$365 Billion Investment Package*

Washington, DC – As Americans contend with the painful effects of the most serious economic crisis since the Great Depression, the U.S. Congress is responding with a bold plan to revive our struggling economy, put millions of people to work, and lay the foundation for America's economic competitiveness in the 21st century. Combined with the economic recovery tax cuts and mandatory programs announced by the Senate Finance Committee, the Senate legislation totals \$825 billion. It is estimated that this legislation will create or sustain over 4 million jobs.

In the coming weeks, the Senate will work closely with the House of Representatives and the Obama Administration in a bi-partisan effort to enact strong and responsible legislation that will put our nation back on the road to economic recovery.

"We must respond to this crisis with all weapons at our disposal," said Senator Daniel K. Inouye (D-Hawaii), Chairman of the Senate Appropriations Committee. **"If we fail to act, the situation will almost certainly worsen, and the American people will continue to pay a heavy price. These investments will not only create jobs now, but will also address neglected priorities here at home and lay the foundation for economic growth in the long-term. The road to recovery will not be quick or easy, but I am confident that working together, our nation will meet this historic challenge."**

The Economy in Crisis

Unemployment: In December, the number of unemployed persons increased by 632,000 to 11.1 million and the unemployment rate rose to 7.2 percent. Job losses were large and widespread across most major industry sectors. Leading economists have predicted that in the absence of dramatic government action, the unemployment rate could reach 10 percent by 2010.

Housing: U.S. foreclosures increased by more than 81 percent last year, a record, with over 2.3 million foreclosures total.

State Budgets: 44 States are facing budget shortfalls totaling \$90 billion for Fiscal Year 2009 and \$145 billion for Fiscal Year 2010, and are faced with the prospect of dramatic cuts in basic services or painful tax increases.

Stock Market: In 2008, U.S. stocks lost roughly \$7 trillion in value.

Bank Failures: During 2008, 25 banks with \$373.6 billion in total assets failed in the U.S.

Gross Domestic Product: The U.S. has officially been in a recession since December of 2007. Real gross domestic product -- the output of goods and services produced by labor and property located in the United States -- decreased at an annual rate of 0.5 percent in the third quarter of 2008.

Cost of Living and Poverty: Overall participation in the Food Stamps program increased by 3.9 million people, or 14 percent, between October 2007 and October 2008, the latest month for which data is available. Food costs have increased 7.0 percent since November 2007, and are forecast to increase an additional 4.5 percent in 2009, according to the United States Department of Agriculture's (USDA) latest estimates.

Urgent Infrastructure Needs

- The American Society of Civil Engineers (ASCE) estimates that \$1.6 trillion is needed over a five-year period to bring the nation's infrastructure to a good condition.
- 27.1 percent of our nation's bridges are structurally deficient, or functionally obsolete.
- 34 percent of America's major roads are in poor or mediocre condition, and 36 percent of America's major urban roads are congested. Americans spend 4.2 billion hours a year stuck in traffic, at a cost of \$78.2 billion a year to the economy. Poor road conditions cost U.S. motorists \$67 billion a year in repairs and operating costs.

The American Recovery and Reinvestment Plan

To meet these enormous challenges, the American Recovery and Reinvestment Plan focuses on five areas critical to rebuilding our economy and creating the conditions for economic growth in the long-term: Infrastructure and Science; Education and Training; Energy; Protecting the Vulnerable; and Health. It is estimated that this legislation will create or sustain over 4 million jobs.

The American Recovery and Reinvestment Plan provides unprecedented oversight, accountability, and transparency to ensure that taxpayer dollars are invested effectively, efficiently, and as quickly as possible.

- Funds are distributed whenever possible through existing formulas and programs that have proven track records and accountability measures already in place.
- Numerous provisions in the bill provide for expedited but effective obligation of funds so that dollars are invested in the economy as quickly as possible.
- The Government Accountability Office and the Inspectors General are provided additional funding for auditing and investigating recovery spending.
- A new Recovery Act Accountability and Transparency Board will coordinate and conduct oversight of recovery spending and provide early warning of problems.
- A special website will provide transparency by posting information about recovery spending, including grants, contracts, and all oversight activities.

- State and local whistleblowers who report fraud and abuse are protected.
- There are no earmarks in this bill.

Please note: The following is a summary of the highlights of the proposed legislation only - not a complete listing of all the programs or spending included in the legislation.

Infrastructure and Science

In order to rebuild our weakening economy, these investments in our physical and cyber infrastructure will put Americans immediately to work rebuilding our crumbling roads and bridges, and will also enable the creation of a stronger and more efficient infrastructure for the 21st century economy. Highlights include:

Top line spending of approximately \$140 Billion

Infrastructure Improvements:

- School Modernization: \$16 billion to repair, renovate and construct public schools in ways that will raise energy efficiency and provide greater access to information technology, and \$3.5 billion to improve higher education facilities.
- Broadband: A total of \$9 billion for the National Telecommunications and Information Administration's (NTIA) Broadband Technology Opportunities Program to improve access to broadband.
- Public Parks: \$3.4 billion for repair, restoration and improvement of public facilities at parks, forests, refuges and on other public and tribal lands.
- Department of Defense Facilities: The stimulus includes \$2.4 billion for quality of life and family-friendly military construction projects such as family housing and child care centers.
- \$3.2 billion for Facilities Sustainment, Restoration and Modernization to be used to invest in energy efficiency projects and to improve the repair and modernization of Department of Defense facilities to include Defense Health facilities.
- \$3.4 billion for VA hospital and medical facility construction and improvements, long-term care facilities for veterans, and improvements at VA national cemeteries.
- \$1.2 billion to accelerate procurement and installation of baggage screening and checkpoint security equipment at airports across the country.
- \$500 million to secure high risk critical infrastructure such as dams, tunnels, and bridges.
- \$4.6 billion to construct, repair or rehabilitate water resource infrastructure nationwide to benefit navigation, hydropower, flood control, environmental restoration, shore protection and other purposes.
- \$1.4 billion to construct, repair, or rehabilitate water delivery infrastructure in the Western U.S. to benefit irrigation, municipal and industrial water supplies, power production, and environmental and other purposes.
- \$2.25 billion for the HOME Investment Partnerships Program block grant to enable state and local governments, in partnership with community-based organizations, to acquire, construct, and rehabilitate affordable housing and provide rental assistance to poor families.

Transportation:

- \$27 billion for formula highway investments.
- \$8.4 billion for formula investments in public transportation.
- \$5.5 billion for competitive grants to state and local governments for surface transportation investments.
- \$1.3 billion for investments in our air transportation system.
- \$1.1 billion for investments in rail transportation.
- \$160 million for investments in maritime transportation.
- Public Lands Roads: \$830 million for repair and restoration of road on park, forest, tribal, and other public lands.

Public Housing:

- \$5 billion to the public housing capital fund to enable local public housing agencies to address a \$32 billion backlog in capital needs - especially those improving energy efficiency in aging developments.
- \$2.1 billion for full-year payments to owners receiving Section 8 project-based rental assistance.
- Neighborhood Stabilization Program - The bill includes \$2.25 billion for the redevelopment of abandoned and foreclosed homes.
- Homeless Prevention Fund - The bill includes \$1.5 billion for homeless prevention activities, which will be sent out to states, cities and local governments through the emergency shelter grant formula.

Environmental Clean-Up/Clean Water:

- A total of \$6.4 billion is directed towards environmental cleanup of former weapon production and energy research sites.
- \$6 billion for sewer, wastewater, and drinking water systems nationwide through EPA's Clean Water and Drinking Water State Revolving Funds.
- \$1.4 billion to support \$3.8 billion in loans and grants for needed water and waste disposal facilities in rural areas.
- \$1.4 billion for EPA's nationwide environmental cleanup programs, including Superfund.

Science:

- National Science Foundation (NSF) Research: \$1.4 billion in funding for scientific research, infrastructure and competitive grants.
- National Aeronautics and Space Administration (NASA): \$1.5 Billion for NASA, including \$500 million for Earth science missions to provide critical data about the Earth's resources and climate.

Education and Training

In order to compete in the 21st century, Americans must have a well-educated workforce, capable of adapting to an ever-changing economic environment. Investing in education now will ensure that the next generation of American workers is ready and able to meet the challenge of global competition. In the near-term, millions of workers have seen their jobs disappear, and find themselves unable to match their skill sets with existing opportunities. Providing job training in new and expanding fields will help to lower the unemployment rate and help today's workers better compete against foreign competition. Highlights include:

Top line spending of approximately \$125 Billion

Education:

- \$39 billion to local school districts and public colleges and universities distributed through existing State and federal formulas.
- \$15 billion to states as incentive grants as a reward for meeting key performance measures.
- \$25 billion to states for other high-priority needs such as public safety and other critical services, which may include education.
- Title I: \$13 billion to help close the achievement gap and enable disadvantaged students to reach their potential.
- Special Education/IDEA: \$13 billion to increase the Federal share of special education services to its highest level ever.
- Pell Grants: \$13.9 billion to increase the Pell Grant maximum award and pay for increases in program costs resulting from increased eligibility and higher Pell Grant awards.

Training:

- Training and Employment Services: \$3.4 billion for job training including formula grants for adult, dislocated worker, and youth programs.
- Vocational Rehabilitation State Grants: \$500 million for state formula grants to help individuals with disabilities prepare for and sustain gainful employment.
- Employment Services Grants: \$400 million to match unemployed individuals to job openings through state employment service agencies and allow states to provide customized reemployment services.

Energy

The bill provides investments in areas critical to the development of clean, efficient, American energy, including modernizing energy transmission, research and development of renewable energy technologies, and modernizing and upgrading government buildings and vehicles. Highlights include:

Top line spending of approximately \$51 Billion

- \$40 billion to the Department of Energy for development of clean, efficient, American energy.
- GSA Federal Fleet: \$2.6 billion to replace older motor fleet vehicles owned by the Federal Government with alternative fuel automobiles that will save on fuel costs and reduce carbon emissions.
- Green Buildings: \$6 billion for repair of federal buildings to increase energy efficiency using green technology. This funding will help eliminate the backlog of \$8.4 billion in building repair projects.
- \$1.3 billion for grants or loans to owners for energy and green retrofit investments.
- \$613 million for Department of Defense energy efficiency upgrades and construction of alternative energy projects, including wind and solar power and photovoltaic system installation.
- \$400 million for rural businesses initiatives including development of renewable energy.

Protecting the Vulnerable:

The current economic crisis has affected all Americans, but none more so than the most vulnerable among us. The spending proposed here will serve to lessen the blow of the current recession, providing immediate relief for children, the poor, and others who may find themselves struggling to put food on the table or a roof over their head. It will also address the urgent need to provide safe and secure places to live, even in neighborhoods that are struggling with high unemployment and surging foreclosure rates.

Top line spending of approximately \$25 Billion

Nutrition:

- \$16.5 billion for additional Supplemental Nutrition Assistance Program (SNAP) benefits (formerly the Food Stamp program).
- Special Supplemental Program for Women, Infants, and Children (WIC). The Committee recommends a total of \$500 million for WIC. In addition, the bill provides \$150 million for Food Banks.

Helping Children:

- \$4.6 billion to increase investments in early childhood programs.

Other Programs:

- Community Development Financial Institutions: \$250 million to immediately provide capital to qualified community development financial institutions (CDFIs) to invest in the development of underserved communities.
- Social Services Block Grant: \$400 million for States and local non-profits to deliver critical services to unemployed and low-income individuals struggling with the effects of the recession.
- Homeowners Assistance Program: \$410 million to expand the Department of Defense Homeowners Assistance Program (HAP) during the national mortgage crisis.

Health

The bill provides investments in areas critical to immediate and long-term healthcare for millions of Americans. Improved information technology, research facilities, and health and wellness programs, will all provide a better foundation for providing quality healthcare to consumers. Highlights include:

Top Line spending of approximately \$16 Billion

Health Information Technology:

- Health Information Technology: \$5 billion to jumpstart efforts to computerize health records to cut costs and reduce medical errors.

Research:

- \$3.5 billion to conduct biomedical research in areas such as cancer, Alzheimer's, heart disease and stem cells, and to improve NIH facilities.
- \$1.1 billion to the Agency for Healthcare Research and Quality, NIH and the HHS Office of the Secretary to evaluate the relative effectiveness of different health care services and treatment options.

Treatment and Prevention:

- Prevention and Wellness: \$5.8 billion to fight preventable diseases and conditions.
- Pandemic Flu Preparedness: \$870 million to complete funding for the President's initiative on pandemic flu preparedness.

Small Business, Law Enforcement, Other

Top Line spending of approximately \$8 Billion

- \$110 Million for GAO and Agency Inspectors General in order to provide appropriate oversight of spending contained in this bill.
- Loans for Small Businesses: \$730 million to stimulate lending to small businesses.
- State and Local Law Enforcement: \$3.95 billion total to support law enforcement efforts.

OPI Statewide Assessment Conference



OPI Assessment and Test Administration Conference

➔ indicates sessions focused
on formative assessment

Wednesday, January 28, 2009

4:00 p.m. - 6:00 p.m.

Late Registration and Pick Up Conference Packets

Thursday, January 29, 2009

7:00 a.m. - 8:30 a.m.

Late registration and Pick Up Conference Packets

7:30 a.m. - 8:30 a.m.
Ballroom

Breakfast - Sponsored by Questar Assessment, Inc and OPI

8:30 a.m. - 8:45 a.m.
Ballroom

Opening Remarks - Conference Kickoff

Judy Snow, Assessment Director

Denise Juneau, Superintendent of Public Instruction

➔ 8:45 a.m. - 9:45 a.m.
Ballroom

Classroom Practice of Formative Assessment

Dr. Margaret Heritage, Assistant Director for Professional Development at the
National Center for Research on Evaluation, Standards and Student Testing
(CRESST) at UCLA

9:45 a.m. - 10:00 a.m.

Break - Sponsored by Measured Progress and OPI

➔ 10:00 a.m. - 11:10 a.m.
Ballroom A

Keynote follow-up

10:00 a.m. - 11:10 a.m.
Conference Room 1

MT Standards Based Education

Colet Bartow, OPI

Participants will be introduced to the Montana Standards-based framework with
opportunities to better understand content standards and how they are implemented in
Montana.

10:00 a.m. - 11:10 a.m.
Conference Room 5

Using the "Clickers" to Help Increase Test Scores With The CRT

Dena Kirschten, Technology Teacher

This session will inform teachers of ways to make assessment a more enjoyable
experience for both teachers and students. We will be exploring how to incorporate
MARS statistics to determine needs of individual students and infuse them into the
daily curriculum using Classroom Performance System (clickers) and ExamView.

10:00 a.m. - 11:10 a.m.
Skybridge 1

AIM, AMO, AYP, and an Overview of the 2008 AYP Results

Denise Bond, OPI

This presentation will demonstrate to educators the importance of AIM (Achievement
in Montana), build on their understanding of AMO (Annual Measurable Objectives),
and examine 2008 AYP (Adequate Yearly Progress) Results.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

10:00 a.m. – 11:10 a.m.
Skybridge 3

**Using Data to Maximize Growth of all Students:
Transformative Assessment in Action**

Mona Sindelar, Testing Coordinator, Huntley Project Schools

Using data, each student will develop a plan to reach their target growth in both a weak and strong area in reading and math based on Montana Standards.

10:00 a.m. – 11:10 a.m.
Skybridge 4

New Ideas in Test Design for Students Who Persistently Fail

Sue Bechard, Measured Progress and Chris Comacho, Children's Progress

The Montana Office of Public Instruction is leading two ambitious research projects to better understand how to make the MontCAS CRT more accessible and appropriate for students with disabilities who struggle to achieve grade level expectations. The ART 2% project is currently administering a high school reading pilot test to explore changes to item content, test format, and read-aloud administration. The Montana GSEG is looking at the effects of providing scaffolding through format and content hints for middle school reading and mathematics assessments. Please join us for a discussion of the innovative strategies used to investigate new assessment approaches and the questions the projects are designed to answer.

11:20 a.m. - 12:30 p.m.
Ballroom A

CRT Test Materials*

Dan Verdick, Measured Progress

This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets.

11:20 a.m. - 12:30 p.m.
Conference Room 1

Small Writers – Enormous Possibilities

Kelly Boswell, Educational Consultant

Participants will learn how to incorporate one-on-one conferences into daily writing instruction, and to communicate to children about their writing, as well as examine a variety of ways to assess young writers.

11:20 a.m. - 12:30 p.m.
Conference Room 5

Lessons Learned/Learning

Sharon Carroll, Moderator

Sharon Carroll will moderate a panel of Montana educators discussing formative assessment strategies and experiences.

11:20 a.m. - 12:30 p.m.
Skybridge 1

CRT-Alt*

Gail McGregor, University of Montana & Lynn Albee, Measured Progress

This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials.

11:20 a.m. - 12:30 p.m.
Skybridge 3

SYCEP

Al McMillin, OPI

An overview of the new revised on-line SYCEP process. This revised tool will allow schools and districts to more efficiently and effectively examine a wide array of available achievement, demographic, and enrollment data electronically and it will also provide a design vehicle for both the long and short term planning components required as part of the SYCEP process rule.

11:20 a.m. - 12:30 p.m.
Skybridge 4

MARS*

Ian McIntosh, Measured Progress

This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

12:30 p.m. – 1:40 p.m.
Ballroom

Lunch – Sponsored by OPI
Entertainment: Billings Senior High School, Expressions

1:50 p.m. – 3:00 p.m.
Ballroom A

CRT Test Administration Training and Test Security*

Judy Snow, OPI

This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.

➔ 1:50 p.m. – 3:00 p.m.
Conference Room 1

Conference with Courage

Kelly Boswell, Educational Consultant

Participants will learn how to incorporate one-on-one conferences into daily writing instruction, and to communicate to children about their writing, as well as examine a variety of ways to assess young writers.

1:50 p.m. – 3:00 p.m.
Conference Room 5

Reporting Quality Data in AIM*

Sara Loewen, OPI

"Quality data" is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source.

➔ 1:50 p.m. – 3:00 p.m.
Skybridge 1

Formative Assessment Through the RTI Lens

Michele Paine, Kalispell Public Schools

The use of formative assessment is a cornerstone of effective instruction, but how does formative assessment fit into the RTI structure? This session looks at the significant role formative assessment plays in the RTI process. Much of what we know about RTI is at the structural level; however, with careful formative assessment practices our RTI interventions can be very powerful where they need to be -at the student level.

1:50 p.m. – 3:00 p.m.
Skybridge 3

Accommodations*

Karen Richem, OPI

This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.

1:50 p.m. – 3:00 p.m.
Skybridge 4

MARS in the Classroom

Ken Stuker, Consultant

This session will focus on the analysis and interpretation of CRT results and their potential influence on instruction, student achievement, and curriculum. Analysis techniques will include methods to identify specific areas in the standards and benchmarks which are strengths or challenges for district students along with methods for interpretation of CRT results to determine particular skills that students find difficult. In addition, other potential applications of CRT results and items will be explored.

3:00 p.m. - 3:15 p.m.

Break – Sponsored by Measured Progress and OPI

3:30 p.m. - 4:40 p.m.
Ballroom A

CRT Test Administration Training and Test Security*

Judy Snow, OPI

This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

3:30 p.m. - 4:40 p.m.
Conference Room 1

CRT Test Materials*

Dan Verdick, Measured Progress

This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets.

3:30 p.m. - 4:40 p.m.
Conference Room 5

Reporting Quality Data in AIM*

Sara Loewen, OPI

"Quality data" is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source.

3:30 p.m. - 4:40 p.m.
Skybridge 1

CRT-Alt*

Gail McGregor, University of Montana & Lynn Albee, Measured Progress

This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials.

3:30 p.m. - 4:40 p.m.
Skybridge 3

Accommodations*

Karen Richem, OPI

This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.

3:30 p.m. - 4:40 p.m.
Skybridge 4

MARS*

Ian McIntosh, Measured Progress

This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

OPI Statewide Assessment Conference



OPI Assessment and Test Administration Conference

Friday, January 30, 2009

- | | |
|--|--|
| 7:00 a.m. - 8:30 a.m. | Registration and Pick Up Conference Packets |
| 7:30 a.m. - 8:30 a.m.
Ballroom | Breakfast – Sponsored by OPI |
| 8:30 a.m. - 9:40 a.m.
Ballroom A | CRT Test Materials*
Dan Verdick, Measured Progress
This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets. |
| 8:30 a.m. - 9:40 a.m.
Conference Room 1 | MT Standards Based Education
Colet Bartow, OPI
Participants will be introduced to the Montana Standards-based framework with opportunities to better understand content standards and how they are implemented in Montana. |
| 8:30 a.m. - 9:40 a.m.
Conference Room 5 | Reporting Quality Data in AIM*
Sara Loewen, OPI
“Quality data” is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source. |
| 8:30 a.m. - 9:40 a.m.
Skybridge 1 | CRT-Alt*
Gail McGregor, University of Montana & Lynn Albee, Measured Progress
This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials. |
| 8:30 a.m. - 9:40 a.m.
Skybridge 2 | Using MARS to Create Student Level Data for Past, Present, and Future Teachers
Dan Zorn, Assistant Superintendent, Kalispell Public Schools
Participants will be shown how the Kalispell Schools are using the student-level data in MARS to create excel reports that are of use to past, present, and future teachers. |

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

8:30 a.m. - 9:40 a.m.
Skybridge 3

Formative Assessment Through the RTI Lens

Michele Paine, Kalispell Public Schools

The use of formative assessment is a cornerstone of effective instruction, but how does formative assessment fit into the RTI structure? This session looks at the significant role formative assessment plays in the RTI process. Much of what we know about RTI is at the structural level; however, with careful formative assessment practices our RTI interventions can be very powerful where they need to be -at the student level.

8:30 a.m. - 9:40 a.m.
Skybridge 4

MARS in the Classroom

Ken Stuker, Consultant

This session will focus on the analysis and interpretation of CRT results and their potential influence on instruction, student achievement, and curriculum. Analysis techniques will include methods to identify specific areas in the standards and benchmarks which are strengths or challenges for district students along with methods for interpretation of CRT results to determine particular skills that students find difficult. In addition, other potential applications of CRT results and items will be explored.

9:50 am - 11:00 a.m.
Ballroom A

CRT Test Administration Training and Test Security*

Judy Snow, OPI

This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.

9:50 am - 11:00 a.m.
Conference Room 1

AIM, AMO, AYP, and an Overview of the 2008 AYP Results

Denise Bond, OPI

This presentation will demonstrate to educators the importance of AIM (Achievement in Montana), build on their understanding of AMO (Annual Measurable Objectives), and examine 2008 AYP (Adequate Yearly Progress) Results.

9:50 am - 11:00 a.m.
Conference Room 5

5YCEP

Al McMillin, OPI

An overview of the new revised on-line 5YCEP process. This revised tool will allow schools and districts to more efficiently and effectively examine a wide array of available achievement, demographic, and enrollment data electronically and it will also provide a design vehicle for both the long and short term planning components required as part of the 5YCEP process rule.

9:50 am - 11:00 a.m.
Skybridge 1

Strategies for Students with Disabilities to Access the General Curriculum

Gail McGregor, University of Montana

This session will address the "disconnect" that sometimes occurs between the skills measured on the statewide assessment and the focus of daily instruction for students with disabilities. An overview of classroom strategies that are intended to enable students with disabilities to access the general education curriculum will be provided. The concept and strategies associated with standards-based IEPs will also be addressed.

9:50 am - 11:00 a.m.
Skybridge 2

Progress Monitoring Using Interactive Tools

Tom Korst, Katrina Stout, Shannon Stephens, and Noel Nesmith

Seeley-Swan High School

This presentation will illustrate how Seeley-Swan High School is successfully differentiating reading/writing instruction and monitoring the progress of individual students without significantly increasing the work-load of the teacher. This is possible through the utilization of a web-based reading and writing program that the high school staff has incorporated into the classroom as a common thread. The presenters will discuss (1) The research supporting our reading/writing program development (2) How we chose the reading/writing program (3) How the reading/writing program is embedded across the curriculum (4) How we are monitoring student progress (5) How our pyramid of reading/writing interventions is incorporated.

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting

9:50 am - 11:00 a.m. Skybridge 3	Accommodations* Karen Richem, OPI This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.
9:50 a.m. - 11:00 a.m. Skybridge 4	MARS* Ian McIntosh, Measured Progress This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.
11:00 a.m. - 11:15 a.m.	Break – Sponsored by Measured Progress and OPI
11:20 a.m. - 12:30 p.m. Ballroom A	CRT Test Administration Training and Test Security* Judy Snow, OPI This session will cover key information for System Test Coordinators to provide for school test coordinators and test administrators on the procedures for handling testing materials, test administration, accommodations, and test security.
11:20 a.m. - 12:30 p.m. Conference Room 1	CRT Test Materials* Dan Verdick, Measured Progress This presentation is intended to familiarize test coordinators and administrators with the testing materials and the resources that are available to help them administer the CRT. We will discuss shipping and receiving, important dates and contacts, where to access information and documents, show what the materials actually look like, and how to code the student response booklets.
11:20 a.m. - 12:30 p.m. Conference Room 5	Reporting Quality Data in AIM* Sara Loewen, OPI “Quality data” is not something that just occurs when the school secretary hits the right number on a keyboard. It is a process. Quality data, like quality students, come from schools. While it is undeniably harder to teach a student than it is to collect statistics, there are procedures that can help us achieve our goals in both cases. With that in mind, the focus of this presentation is on data entry — getting things right at the source.
11:20 a.m. - 12:30 p.m. Skybridge 1	CRT-Ait* Gail McGregor, University of Montana & Lynn Albee, Measured Progress This session will focus on the administration procedures for the CRT-Alternate Assessment. A complete review of how CRT-Alternate test materials are received, distributed and used during test administration will be discussed. The session will also provide participants with important dates and deadlines, as well as information on how to label and return materials.
11:20 a.m. - 12:30 p.m. Skybridge 3	Accommodations* Karen Richem, OPI This session will explore the OPI List of Approved Accommodations in the 2009 Accommodations Manual, and discuss the differences between the various types of standard and non-standard accommodations.
11:20 a.m. - 12:30 p.m. Skybridge 4	MARS* Ian McIntosh, Measured Progress This session will provide an overview of the web-based MARS reporting system including system access, functionality, and navigation. Participants will also explore disaggregating and exporting data using MARS.
12:30 p.m. - 1:30 p.m. Ballroom	Lunch –Sponsored by OPI
1:30 p.m.	Conference Adjourned

* Training session for 2009 CRT and/or CRT-Alternate Test Administration, AIM Data, and Reporting



U.S. Senate Committee on Appropriations

PRESS RELEASE

For Immediate Release: January 23, 2009
Contact: Rob Blumenthal w/Inouye 202-224-1010
John Bray w/Inouye 202-224-3751

Senate Appropriations Committee Releases Highlights of American Recovery and Reinvestment Plan *Committee Announces \$365 Billion Investment Package*

Washington, DC – As Americans contend with the painful effects of the most serious economic crisis since the Great Depression, the U.S. Congress is responding with a bold plan to revive our struggling economy, put millions of people to work, and lay the foundation for America's economic competitiveness in the 21st century. Combined with the economic recovery tax cuts and mandatory programs announced by the Senate Finance Committee, the Senate legislation totals \$825 billion. It is estimated that this legislation will create or sustain over 4 million jobs.

In the coming weeks, the Senate will work closely with the House of Representatives and the Obama Administration in a bi-partisan effort to enact strong and responsible legislation that will put our nation back on the road to economic recovery.

"We must respond to this crisis with all weapons at our disposal," said Senator Daniel K. Inouye (D-Hawaii), Chairman of the Senate Appropriations Committee. **"If we fail to act, the situation will almost certainly worsen, and the American people will continue to pay a heavy price. These investments will not only create jobs now, but will also address neglected priorities here at home and lay the foundation for economic growth in the long-term. The road to recovery will not be quick or easy, but I am confident that working together, our nation will meet this historic challenge."**

The Economy in Crisis

Unemployment: In December, the number of unemployed persons increased by 632,000 to 11.1 million and the unemployment rate rose to 7.2 percent. Job losses were large and widespread across most major industry sectors. Leading economists have predicted that in the absence of dramatic government action, the unemployment rate could reach 10 percent by 2010.

Housing: U.S. foreclosures increased by more than 81 percent last year, a record, with over 2.3 million foreclosures total.

State Budgets: 44 States are facing budget shortfalls totaling \$90 billion for Fiscal Year 2009 and \$145 billion for Fiscal Year 2010, and are faced with the prospect of dramatic cuts in basic services or painful tax increases.

Stock Market: In 2008, U.S. stocks lost roughly \$7 trillion in value.

Bank Failures: During 2008, 25 banks with \$373.6 billion in total assets failed in the U.S.

Gross Domestic Product: The U.S. has officially been in a recession since December of 2007. Real gross domestic product -- the output of goods and services produced by labor and property located in the United States -- decreased at an annual rate of 0.5 percent in the third quarter of 2008.

Cost of Living and Poverty: Overall participation in the Food Stamps program increased by 3.9 million people, or 14 percent, between October 2007 and October 2008, the latest month for which data is available. Food costs have increased 7.0 percent since November 2007, and are forecast to increase an additional 4.5 percent in 2009, according to the United States Department of Agriculture's (USDA) latest estimates.

Urgent Infrastructure Needs

- The American Society of Civil Engineers (ASCE) estimates that \$1.6 trillion is needed over a five-year period to bring the nation's infrastructure to a good condition.
- 27.1 percent of our nation's bridges are structurally deficient, or functionally obsolete.
- 34 percent of America's major roads are in poor or mediocre condition, and 36 percent of America's major urban roads are congested. Americans spend 4.2 billion hours a year stuck in traffic, at a cost of \$78.2 billion a year to the economy. Poor road conditions cost U.S. motorists \$67 billion a year in repairs and operating costs.

The American Recovery and Reinvestment Plan

To meet these enormous challenges, the American Recovery and Reinvestment Plan focuses on five areas critical to rebuilding our economy and creating the conditions for economic growth in the long-term: Infrastructure and Science; Education and Training; Energy; Protecting the Vulnerable; and Health. It is estimated that this legislation will create or sustain over 4 million jobs.

The American Recovery and Reinvestment Plan provides unprecedented oversight, accountability, and transparency to ensure that taxpayer dollars are invested effectively, efficiently, and as quickly as possible.

- Funds are distributed whenever possible through existing formulas and programs that have proven track records and accountability measures already in place.
- Numerous provisions in the bill provide for expedited but effective obligation of funds so that dollars are invested in the economy as quickly as possible.
- The Government Accountability Office and the Inspectors General are provided additional funding for auditing and investigating recovery spending.
- A new Recovery Act Accountability and Transparency Board will coordinate and conduct oversight of recovery spending and provide early warning of problems.
- A special website will provide transparency by posting information about recovery spending, including grants, contracts, and all oversight activities.

- State and local whistleblowers who report fraud and abuse are protected.
- There are no earmarks in this bill.

Please note: The following is a summary of the highlights of the proposed legislation only - not a complete listing of all the programs or spending included in the legislation.

Infrastructure and Science

In order to rebuild our weakening economy, these investments in our physical and cyber infrastructure will put Americans immediately to work rebuilding our crumbling roads and bridges, and will also enable the creation of a stronger and more efficient infrastructure for the 21st century economy. Highlights include:

Top line spending of approximately \$140 Billion

Infrastructure Improvements:

- School Modernization: \$16 billion to repair, renovate and construct public schools in ways that will raise energy efficiency and provide greater access to information technology, and \$3.5 billion to improve higher education facilities.
- Broadband: A total of \$9 billion for the National Telecommunications and Information Administration's (NTIA) Broadband Technology Opportunities Program to improve access to broadband.
- Public Parks: \$3.4 billion for repair, restoration and improvement of public facilities at parks, forests, refuges and on other public and tribal lands.
- Department of Defense Facilities: The stimulus includes \$2.4 billion for quality of life and family-friendly military construction projects such as family housing and child care centers.
- \$3.2 billion for Facilities Sustainment, Restoration and Modernization to be used to invest in energy efficiency projects and to improve the repair and modernization of Department of Defense facilities to include Defense Health facilities.
- \$3.4 billion for VA hospital and medical facility construction and improvements, long-term care facilities for veterans, and improvements at VA national cemeteries.
- \$1.2 billion to accelerate procurement and installation of baggage screening and checkpoint security equipment at airports across the country.
- \$500 million to secure high risk critical infrastructure such as dams, tunnels, and bridges.
- \$4.6 billion to construct, repair or rehabilitate water resource infrastructure nationwide to benefit navigation, hydropower, flood control, environmental restoration, shore protection and other purposes.
- \$1.4 billion to construct, repair, or rehabilitate water delivery infrastructure in the Western U.S. to benefit irrigation, municipal and industrial water supplies, power production, and environmental and other purposes.
- \$2.25 billion for the HOME Investment Partnerships Program block grant to enable state and local governments, in partnership with community-based organizations, to acquire, construct, and rehabilitate affordable housing and provide rental assistance to poor families.

Transportation:

- \$27 billion for formula highway investments.
- \$8.4 billion for formula investments in public transportation.
- \$5.5 billion for competitive grants to state and local governments for surface transportation investments.
- \$1.3 billion for investments in our air transportation system.
- \$1.1 billion for investments in rail transportation.
- \$160 million for investments in maritime transportation.
- Public Lands Roads: \$830 million for repair and restoration of road on park, forest, tribal, and other public lands.

Public Housing:

- \$5 billion to the public housing capital fund to enable local public housing agencies to address a \$32 billion backlog in capital needs - especially those improving energy efficiency in aging developments.
- \$2.1 billion for full-year payments to owners receiving Section 8 project-based rental assistance.
- Neighborhood Stabilization Program - The bill includes \$2.25 billion for the redevelopment of abandoned and foreclosed homes.
- Homeless Prevention Fund - The bill includes \$1.5 billion for homeless prevention activities, which will be sent out to states, cities and local governments through the emergency shelter grant formula.

Environmental Clean-Up/Clean Water:

- A total of \$6.4 billion is directed towards environmental cleanup of former weapon production and energy research sites.
- \$6 billion for sewer, wastewater, and drinking water systems nationwide through EPA's Clean Water and Drinking Water State Revolving Funds.
- \$1.4 billion to support \$3.8 billion in loans and grants for needed water and waste disposal facilities in rural areas.
- \$1.4 billion for EPA's nationwide environmental cleanup programs, including Superfund.

Science:

- National Science Foundation (NSF) Research: \$1.4 billion in funding for scientific research, infrastructure and competitive grants.
- National Aeronautics and Space Administration (NASA): \$1.5 Billion for NASA, including \$500 million for Earth science missions to provide critical data about the Earth's resources and climate.

Education and Training

In order to compete in the 21st century, Americans must have a well-educated workforce, capable of adapting to an ever-changing economic environment. Investing in education now will ensure that the next generation of American workers is ready and able to meet the challenge of global competition. In the near-term, millions of workers have seen their jobs disappear, and find themselves unable to match their skill sets with existing opportunities. Providing job training in new and expanding fields will help to lower the unemployment rate and help today's workers better compete against foreign competition. Highlights include:

Top line spending of approximately \$125 Billion

Education:

- \$39 billion to local school districts and public colleges and universities distributed through existing State and federal formulas.
- \$15 billion to states as incentive grants as a reward for meeting key performance measures.
- \$25 billion to states for other high-priority needs such as public safety and other critical services, which may include education.
- Title I: \$13 billion to help close the achievement gap and enable disadvantaged students to reach their potential.
- Special Education/IDEA: \$13 billion to increase the Federal share of special education services to its highest level ever.
- Pell Grants: \$13.9 billion to increase the Pell Grant maximum award and pay for increases in program costs resulting from increased eligibility and higher Pell Grant awards.

Training:

- Training and Employment Services: \$3.4 billion for job training including formula grants for adult, dislocated worker, and youth programs.
- Vocational Rehabilitation State Grants: \$500 million for state formula grants to help individuals with disabilities prepare for and sustain gainful employment.
- Employment Services Grants: \$400 million to match unemployed individuals to job openings through state employment service agencies and allow states to provide customized reemployment services.

Energy

The bill provides investments in areas critical to the development of clean, efficient, American energy, including modernizing energy transmission, research and development of renewable energy technologies, and modernizing and upgrading government buildings and vehicles. Highlights include:

Top line spending of approximately \$51 Billion

- \$40 billion to the Department of Energy for development of clean, efficient, American energy.
- GSA Federal Fleet: \$2.6 billion to replace older motor fleet vehicles owned by the Federal Government with alternative fuel automobiles that will save on fuel costs and reduce carbon emissions.
- Green Buildings: \$6 billion for repair of federal buildings to increase energy efficiency using green technology. This funding will help eliminate the backlog of \$8.4 billion in building repair projects.
- \$1.3 billion for grants or loans to owners for energy and green retrofit investments.
- \$613 million for Department of Defense energy efficiency upgrades and construction of alternative energy projects, including wind and solar power and photovoltaic system installation.
- \$400 million for rural businesses initiatives including development of renewable energy.

Protecting the Vulnerable:

The current economic crisis has affected all Americans, but none more so than the most vulnerable among us. The spending proposed here will serve to lessen the blow of the current recession, providing immediate relief for children, the poor, and others who may find themselves struggling to put food on the table or a roof over their head. It will also address the urgent need to provide safe and secure places to live, even in neighborhoods that are struggling with high unemployment and surging foreclosure rates.

Top line spending of approximately \$25 Billion

Nutrition:

- \$16.5 billion for additional Supplemental Nutrition Assistance Program (SNAP) benefits (formerly the Food Stamp program).
- Special Supplemental Program for Women, Infants, and Children (WIC). The Committee recommends a total of \$500 million for WIC. In addition, the bill provides \$150 million for Food Banks.

Helping Children:

- \$4.6 billion to increase investments in early childhood programs.

Other Programs:

- Community Development Financial Institutions: \$250 million to immediately provide capital to qualified community development financial institutions (CDFIs) to invest in the development of underserved communities.
- Social Services Block Grant: \$400 million for States and local non-profits to deliver critical services to unemployed and low-income individuals struggling with the effects of the recession.
- Homeowners Assistance Program: \$410 million to expand the Department of Defense Homeowners Assistance Program (HAP) during the national mortgage crisis.

Health

The bill provides investments in areas critical to immediate and long-term healthcare for millions of Americans. Improved information technology, research facilities, and health and wellness programs, will all provide a better foundation for providing quality healthcare to consumers. Highlights include:

Top Line spending of approximately \$16 Billion

Health Information Technology:

- Health Information Technology: \$5 billion to jumpstart efforts to computerize health records to cut costs and reduce medical errors.

Research:

- \$3.5 billion to conduct biomedical research in areas such as cancer, Alzheimer's, heart disease and stem cells, and to improve NIH facilities.
- \$1.1 billion to the Agency for Healthcare Research and Quality, NIH and the HHS Office of the Secretary to evaluate the relative effectiveness of different health care services and treatment options.

Treatment and Prevention:

- Prevention and Wellness: \$5.8 billion to fight preventable diseases and conditions.
- Pandemic Flu Preparedness: \$870 million to complete funding for the President's initiative on pandemic flu preparedness.

Small Business, Law Enforcement, Other

Top Line spending of approximately \$8 Billion

- \$110 Million for GAO and Agency Inspectors General in order to provide appropriate oversight of spending contained in this bill.
- Loans for Small Businesses: \$730 million to stimulate lending to small businesses.
- State and Local Law Enforcement: \$3.95 billion total to support law enforcement efforts.